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# Intercultural sensitivity : theory development, instrument construction and preliminary validation.

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INTERCULTURAL SENSITIVITY: THEORY DEVELOPMENT, INSTRUMENT  
CONSTRUCTION AND PRELIMINARY VALIDATION

A Dissertation Presented

By

ANNIE DUMISILE MYENI

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

DOCTOR OF EDUCATION

September 1983

Education



Annie Dumisile Myeni 1983

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INTERCULTURAL SENSITIVITY:  
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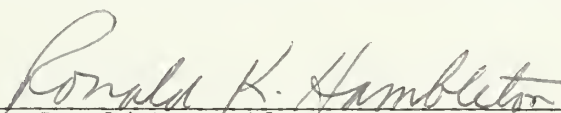
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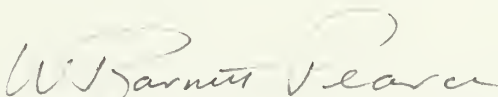
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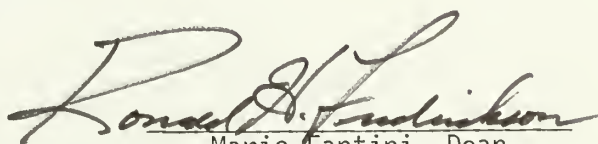
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Dr. Barnett Pearce, Committee Member



Mario Fantini, Dean  
School of Education

In memory of my parents  
Lillian and Joseph Myeni

To my dear daughter Nonhlanhla  
and  
To all my brothers and sisters



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## ABSTRACT

Intercultural Sensitivity: Theory Development, Instrument  
Construction, and Preliminary Validation

(September 1983)

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First a theoretical framework for the understanding of intercultural sensitivity was developed. George Kelly's personal construct theory was applied in the definition and in the elaboration of this construct. This theory was selected after a review of various approaches in the understanding of this construct.

Based on the developed framework, an instrument was then constructed to measure intercultural sensitivity, or a person's potential to adapt successfully in cross cultural situations. This instrument, the Survey of Intercultural Constructs (SIC), is intended as a research tool to be used with people undergoing cross cultural training. It is general rather than culture specific, and is applicable in a wide variety of cultural situations, and with different types of people.

The SIC is based on the notion that intercultural behavior can be explained in part by differences in personalities or construction systems. Personal construct theory states that people look at others through constructs they create or choose, and then test against reality.

A construct is a way in which at least two things are similar and contrast with a third. To analyze people's cognitive processes, information is needed about the content and structure of their construction systems. The SIC elicits the constructs a person applies to people of the same and of other cultures.

A preliminary version of the SIC was developed and tried out on 50 people. The data obtained was used primarily to improve the draft instrument. A few preliminary validity studies were also conducted with it.

The preliminary version of the SIC was reviewed by an expert in the field of tests and measurements. His comments, together with comments obtained from the tryout sample, were used in the development of the second version. A review of the second version by 13 experts in the area of cross cultural training led to the development of the final version of the instrument. No validity or reliability studies were conducted with the final version. Therefore validity and reliability studies on it are needed, and recommendations to that effect are made.



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# CHAPTER I

## INTRODUCTION

### Rationale for the Study

The demands of the modern world have created situations where people find it necessary to interact with people from cultures other than their own. The barriers which tended to keep cultures apart in the past have been broken. People often find themselves in cross cultural situations which require them to adjust to norms, values, and expectations very different from those to which they are accustomed. Survival in such situations requires the demonstration of certain skills, emotional traits and attitudes.

Attitudes and skills are formed through social influences and can be changed through such. This realization has led to the birth of a new discipline in education that attempts to provide structured training experiences in intercultural effectiveness. Hence the existence of institutions such as the Experiment in International Living in Brattleboro, Vermont, which provides learning opportunities in cross cultural training and prepares individuals for careers in organizations involved in international development.<sup>1</sup> Organized efforts like these have grown out of an increased awareness of the significance of intercultural dimensions in world affairs. There is now a move to educate and train

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<sup>1</sup>Other institutions involved in cross cultural training include the Society for Intercultural Education, Training, and Research (Sietar), and the Peace Corp Office of Program Development, both located in Washington, D.C., just to name a few.

people to live effectively in a world which requires more cross cultural interaction than ever before.

In order to plan and implement successful training programs that enhance intercultural sensitivity, educators need to have a better understanding of the nature of this construct. Such knowledge will influence the nature and form of training programs as well as what is achieved by them. There are questions concerning what it means to be interculturally sensitive, whether intercultural sensitivity is a trait, or whether different quantities of it are related to the ability to function effectively in various cultures. A number of independent variables to be considered in the execution of research of cross cultural training programs were identified by Triandis (1977). These include the different approaches to cross cultural training, quantity of training, order effects, timing of training, identification of ideal trainers, and the identification of trainable people. These and many other kinds of research questions could lead to increased understanding of intercultural sensitivity.

Many people involved in cross cultural training have expressed a concern about the lack of valid evaluation procedures, criteria, or measures. Triandis (1977) noted that there are already many kinds of cross cultural training, ". . . but the weakest aspect of this work is the evaluation of its effectiveness" (p. 20). Many other researchers (e.g., Benson, 1978; Ruben & Kealey, 1979; Stoner, Aram & Rubin, 1972) have expressed concern about the lack of effort that has been made in the determination of adequate criteria and satisfactory measures of

overseas performance. Much research has been carried out on the subject and yet the approaches of the various researchers have been so diverse that it is difficult to interrelate their findings (Brein & David, 1971). This is because the nature and measurement of intercultural adaptation have not been adequately described in the past. In the selection of personnel for overseas work and in the evaluation of cross cultural training programs, various procedures have been used. These include self evaluations of the trainees, interviews, discussions, personal records, observations and questionnaires. But the extent of the adequacy of these methods, in most cases, has not been assessed. These considerations therefore call for the development of systematic tools and methods for carrying out research on intercultural adaptation and for the evaluation of programs dealing with cross cultural training.

### Statement of the Problem

The need for systematic measurement tools has been most apparent in the area of selection and evaluation. However a microscopic and more systematic analysis of this problem indicates that the need for valid measurement procedures exists in the areas of selection, evaluation, research, counseling, and perhaps classification and placement. These areas are investigated below.

1. Selection. There is a need for valid measures for use in the selection of suitable candidates for overseas positions. Many organizations involved in placing personnel overseas--such as the Peace Corps, church missionary boards, multinational corporations, and foreign

affairs departments of many governments--have had to wrestle with this problem. In most cases there are neither enough vacancies for everyone indicating interest in an overseas position, nor would it be wise to accept anyone who applies. Therefore only the most promising candidates must be selected because of the high cost of attrition. In selection the question to be answered is what kind of person is likely to adapt most successfully in cross cultural situations, and on that basis deciding who is to be accepted and who is to be rejected.

2. Evaluation of Training. After cross cultural training programs have been implemented, the trainers ordinarily are interested in measuring the effect of their programs. Through formative evaluation, particular deficiencies in the participants' learning can be identified so as to initiate remedial actions in the program. Another problem area has been that of determining the success of adaptation for a trainee after he or she has been living and working in a foreign country. This is the ultimate criterion, or the dependent variable, of most cross cultural training endeavors.

3. Research. Even before the implementation of training programs, diagnostic procedures and measures are required to determine the need areas that proposed training should emphasize. An understanding of the needs of trainees prior to the onset of a training program improves the quality of the training. Also a detailed understanding of intercultural adaptation by trainees is essential since this will influence the nature and type of the training provided. Valid measures and procedures are necessary to carry out research studies that attempt to delineate



individual or group differences with regards to intercultural adaptation, and to study the effects of many variables associated with behavioral differences.

4. Counseling. For the person contemplating an overseas job or career and seeking assistance in making such a decision, valid measurement tools or procedures are appropriate and necessary. They can contribute greatly in counseling people who are already experiencing difficulty in adjusting to cross cultural situations. McCoy (1980) has done such work with people in "culture shocked" intercultural marriages in Hong Kong. In such situations, measures may be used to increase a person's self understanding and personal development. They may provide the person with information relevant to making decisions to resolve a problem.

5. Classification and Placement. Measures of intercultural sensitivity in some training situations might be needed for classifying individuals according to their abilities to benefit from different types of programs. For instance, such measures could help determine which people would benefit most from area specific training and which from more general training or sensitivity training, or a combination of types.

#### Purpose of the Study

The purpose of this study is twofold: first, to develop a theoretical framework for the understanding of intercultural sensitivity;

secondly, to develop and validate an instrument to measure this construct.

### Methodology

Construct development consisted first of reviewing the literature to find how intercultural sensitivity had been previously defined. On the basis of this literature review, a theory was selected and applied in the attempt to understand the nature of intercultural sensitivity. Instrument development was based on the elaboration of that theory, applying a technique which both represents and tests it. The strategy followed in instrument development is what Hase and Goldberg (1971) referred to as the "theoretical strategy."

Three versions of the instrument were developed in a series of stages. The first version was tried out on a sample of 50 people. The data obtained was used mainly to revise and improve the instrument. A few preliminary studies of the validity of this instrument were also conducted, after which the instrument was reviewed by an expert in the field of testing. This reviewer's comments as well as comments obtained from the tryout sample were used in the development of the second version. The second version was reviewed by experts in the field of cross cultural training, which review led to the development of the third and final version.

### Description of the Instrument

The instrument was designed to be general rather than culture specific, that is, to measure a person's potential to adapt successfully in a wide variety of settings. A culture specific instrument is efficient if a person is to interact with people from only that one culture. However, many situations in today's world demand interactions with people from various cultures. Therefore dealing with a wide gamut of culture variation may prove more efficient in the long run. This view is shared by Harris (1972), who felt that there is more value to cross cultural education when it is general than when it is oriented towards a specific culture. The culture awareness approach to cross cultural training is based on this notion (Gudykunst, Hammer & Wiseman, 1977).

### Uses Planned for the Instrument

The instrument was intended for use mainly as a research tool, though it may be adopted for use in evaluation and in counseling. A large percentage of the clientele expected to be served would be undergraduate or graduate level personnel in the public and private sectors who would be undergoing training and preparation for positions in countries other than their own, or in other settings which involve a cross cultural dimension.

### Definition of Terms

Intercultural sensitivity was defined as a person's potential to adapt successfully in a cross cultural situation.

The first element in this definition, "a person's potential," is the independent variable in this study, or the variable to be measured. The interest here is not so much in a person's observable current behavior or behaviors at the time of measurement, but in whatever it is within a person that will enable him or her to display appropriate behaviors when in a situation that calls upon him or her to do so.

The second element in this definition is "to adapt successfully." This is the dependent variable, the presumed effect, or the consequence of intercultural sensitivity. A person adapts successfully to the extent that he or she is able to play roles in the social processes involving people from another culture. People assume roles in relation to others when their behavior follows from their perception of how the others think (Kelly, 1955). Adaptation depends on the extent to which a person is able to construe and accept the other person's outlook. The stress here is upon interpersonal relationships.<sup>2</sup> This study focuses on adaptation within the psychological realm. No attempt is made to explore implications of a physical, anthropological, or political nature which might be involved in the complete evaluation of a particular person's adaptation process.

Lastly, the interest is on adaptation after the initial period of culture shock, which many researchers have investigated. Upon arrival

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<sup>2</sup>This does not imply that adaptation consists only of interpersonal relationships; it may involve the physical realm, such as climatic conditions, for instance, which is an aspect studied by some researchers (e.g., Pruitt, 1978).



in a new cultural environment most people experience culture shock with varying degrees of intensity. It is usually marked by high levels of anxiety and general disorientation.

The third element in this definition is "a cross cultural situation." This is a situation involving at least one other person who is not a member of one's culture. Cultural homogeneity is determined by similarity or commonality in the way that people construe life's experiences, or commonality in outlook, rather than conventionally used criteria such as race, or ethnic background.

The term "intercultural" sensitivity rather than "cross cultural" is preferred because the aim is to lay stress on the quality of interaction between individuals, rather than between cultures or between an individual and a culture. An interaction is viewed as a joint venture which should be a mutually beneficial and supportive process to all involved, as suggested by Casmir (1978). It should not be seen as an opportunity to serve, analyze, study, teach, exploit, or persuade another individual from a detached "I against them" perspective.

The term intercultural "sensitivity" rather than intercultural "adaptation" is preferred since the aim here is to assess a person's potential to adapt even before actual participation in a particular foreign culture has taken place.

The terms "intercultural adjustment, intercultural effectiveness, acculturation, and intercultural adaptation" are used interchangeably throughout the text.

### Plan of the Study

Following this introduction, Chapter II consists of a review and critical evaluation of different approaches to the study of the nature of intercultural adaptation and its prediction. To succeed in constructing an instrument to measure intercultural sensitivity, an understanding of the nature of intercultural adaptation is required. Reviewed here are empirical, communication, and psychological approaches to the study of its nature. Of course, there are overlaps between these classes. In addition to examining these different approaches, the critical evaluation begins to unveil some aspects of the theory and the measurement approach which are later applied in the development of the instrument which is the focus of this dissertation.

The third chapter elaborates George Kelly's personal construct theory which is the theoretical base of the present instrument development effort. Personal construct theory is used in the operationalization of the concept of intercultural adaptation.

The fourth chapter presents the technique applied in instrument development, the Repertory Grid technique. This is in fact a practical embodiment of personal construct theory. The developed instrument, its underlying assumptions and procedures followed in scoring it are presented.

In the fifth chapter the steps taken in the development of the instrument are presented. The preliminary versions of this instrument

are presented as well as the validity and reliability studies conducted using one of them.

The last chapter presents a summary of all the procedures followed and the results obtained. A review of the instrument is presented and suggestions for further research on it are made.

## CHAPTER II

### THE NATURE OF INTERCULTURAL ADAPTATION AND ITS PREDICTION

This chapter reviews and evaluates different approaches to the study of intercultural adaptation and its prediction. First, attempts that have been made to study intercultural adaptation through empirical means are examined. Then the contributions that have been made by communication theories are reviewed, assessing the extent of their utility in understanding and explaining intercultural adaptation. Lastly the role believed should be played by psychological theory is outlined. It is suggested that intercultural behavior can be explained, in part, by differences in personality organization. Past applications of behavioral theories to intercultural behavior are reviewed.

#### Empirical Approaches

Many isolated efforts to describe and define intercultural adaptation theoretically have been made on the basis of past research or through empirical means. Even though many of these efforts do not fit into any identifiable theoretical framework, they deserve attention because they have produced substantial information about the nature of intercultural adaptation. There have been almost as many different approaches to the study of intercultural adaptation as these efforts, and as many different findings as there have been studies. For this reason it is very difficult to interrelate the different findings. What most



of these studies have produced are lists of traits or criteria of an adapted person. In many cases no attempts were made by the researchers to define intercultural adaptation.

The review of literature that follows illustrates the existent variability in the conceptions of intercultural adaptation and in the findings of the different studies. The review also brings to light the variability and the types of research tools that have been employed in conducting these studies.

### Review of Literature

Pruitt (1978) considered intercultural adaptation as consisting of two parts: adjustment and assimilation.

Adjustment means coping with one's environment sufficiently well to be happy, comfortable, and fairly free of problems. Assimilation is defined as the state in which a person begins to enjoy and participate in a new culture and is ready to reject his own culture. (p. 90)

In his own study of the adaptation of African students in the United States, Pruitt employed a self administered questionnaire mostly with structured responses. Adjustment was measured by the degree of happiness and the absence of problems in the area of climate, finances, food, housing, immigration, communication with Americans, studies, dating, discrimination, loneliness, and homesickness. Some items dealt with the students' closeness to their own society, while others dealt with the students' political views, religious activities, and their attitudes towards American values and way of life.

Pruitt's major finding was that overall assimilation as defined was predictive of adjustment. The aspects of assimilation particularly

related to adjustment are: contact with the host culture, liking the host culture, and liking host culture food. He found that students from prominent families in their countries, younger students upon arrival, students who had attended an orientation to American education, and students who spent time with Americans rather than with other Africans were most easily assimilated and had a more positive attitude towards American values. In Pruitt's study intercultural adaptation is seen as being equivalent to embracing American values and the American way of life to a point of "going native" and rejecting one's own cultural values.

Intercultural adaptation has also been thought of as the ability to recognize specific cultural traits as belonging to a particular group. Lindgren and Yu (1975) in their study of Chinese immigrants to the United States found that cultural understanding thus defined is enhanced by increased exposure to a culture. They asked their subjects to identify American traits in pairs of British and American traits. If what these researchers set out to measure was not intercultural adaptation as defined in this dissertation, but rather cross cultural insight and empathy, as they stated, these attributes have been linked by many other researchers to intercultural adjustment or adaptation.

Stoner, Aram, and Rubin (1972) found a number of factors to be associated with effective overseas performance. First, certain personal characteristics were found to be important. These included a high level of ability, cultural empathy, emotional maturity, creativity, a sense of politics, flexibility, rigidity, and a sense of humor. Marital

status was found to make a difference. Married man, particularly those whose wives were supportive, performed better. Situational characteristics were also found to matter. Events that occurred early in a person's work assignment determined his future success or failure. These researchers used questionnaires, interviews, supervisory ratings, and self ratings to carry out their study.

Gullahorn and Gullahorn (1963) visualized intercultural adaptation as the achievement of a complementarity of role expectations between people from different cultures. This is the state wherein a person can anticipate another's responses with sufficient accuracy so that his or her behavior is likely to elicit the desired results. In their research Gullahorn and Gullahorn found that interaction and sharing contribute to intercultural satisfaction if the participants' values and goals are relatively similar. If the values and goals are dissimilar, proximity and interaction only help to define the divergencies and strong antipathy. These researchers used interviews as their research tools.

Rather than attempt to define intercultural adaptation, Smith (1976) described it in terms of a number of variables which he said were important in achieving what he termed "transracial communication." The sharing of a language--a verbal or nonverbal code system--was one. Actual involvement or availability for communication was another. This includes the willingness and the enthusiasm to participate. The willingness to seek the other person's point of view was another important variable as well as the ability to look beyond the other person's words to the source of his or her ideas.

In a similar fashion Ackermann (1976) said the characteristics necessary for intercultural adaptation include a cosmopolitan perspective, or cultural relativism, where other cultures are accepted as valid as one's own. Intercultural communication skills are also important.

In describing what he felt should be the role of an international manager in a multinational corporation, Shetty (1971) suggested that adaptation requires a knowledge of the environment and a quality of mind that emphasizes experimenting and adaptation of practices. It requires flexibility, an international frame of reference, rather than a national one, and skills in effective intercultural communication. He referred to these attributes as "Factor X," which he said also consists of cultural flexibility, friendliness and the lack of racial or religious prejudice.

In a presentation of different perspectives about the nature of the human communication process Gardner (1972) suggested that there might be people who have the ability to be effective in any cultural circumstance. The personality of such people, he suggested, would have at least the following characteristics: (a) an unusual degree of integration or stability; (b) a central organization of the extrovert type; (c) a value system which includes the value of all men; (d) socialization based on cultural universals rather than cultural particulars; (e) a marked telepathic or intuitive sensitivity, which is an empathic capacity or social perceptiveness or sensitivity, the ability to interpret correctly the attitudes and intentions of others, the ability to

anticipate and predict the behavior of others, and the ability to take the role of others.

On the basis of past research, Ruben and Kealey (1979) conceived of intercultural adaptation as comprising the three dimensions: culture shock, psychological adjustment, and interactional effectiveness. To measure these dimensions they employed questionnaires, interviews, self report measures, and observations of a sample of Canadian technical advisors and their families living and working in Kenya. They showed that measures of communicative competence used on the same sample prior to their departure from Canada predicted their adaptation with reasonable accuracy, particularly if adaptation was conceived of in terms of psychological adjustment and interactional effectiveness. Psychological adjustment was operationalized as comfort, acceptance, and satisfaction with cultural, social, linguistic, political, and personal dimensions of life in the foreign country. Interactional effectiveness was operationalized as the extent of interaction with host country nationals, and as the concern for and success at transferring skills to host country nationals. Culture shock seemed to stand out in contrast to these two factors.

What these researchers concluded was that adaptation should be considered multidimensional, comprising probably psychological adjustment and interactional effectiveness. They concluded also that communicative competence assessed behaviorally could be useful in predicting intercultural adaptation. The dimensions of communicative competence believed to be important in the prediction of intercultural adaptation were



listed as display of respect, interaction posture (non-judgmentalism), orientation to knowledge (cultural relativism), empathy, self oriented role behavior (flexibility in task and socio-emotional roles), interaction management, and tolerance for ambiguity (Ruben, 1976). The fact that these same dimensions have been often mentioned by many others as important to intercultural adaptation demonstrates the strong tendency of Ruben and Kealey to equate communicative competence to intercultural adaptation.

Brein and David (1971) suggested that in order to understand the process of intercultural adaptation, it is necessary to relate specific background factors, personality traits, and situational factors to the communication process. On the basis of the analysis of past research they observed a number of factors as related to intercultural adjustment. The first is effective interpersonal relations with host culture people. To establish an understanding between people, they said, there has to be an effective exchange of information, both verbally and non-verbally. In fact these authors also equated adjustment to effective communication. The second factor related to intercultural adjustment was a person's background. Religious affiliations and paternal absence during childhood, for instance, have been linked to adjustment by past research. The third factor is the nature of the cross cultural situation. This means factors associated with particular situations in which sojourners find themselves in a foreign country. Which countries Peace Corps volunteers are sent to has been found to contribute to their success or failure in adapting. Whether the person is placed in an urban

or rural setting has also been found to make a difference. Lastly, the degree of social interaction with host culture members has been found related to adjustment. In many studies, social interaction itself has been found to be related to many other background factors such as socioeconomic factors, urban versus rural background, previous contact, liberal arts versus science background, and personality factors.

In his meticulously undertaken study of Peace Corps volunteers in Tonga, Harris (1973) delineated four factors that discriminated between successful and unsuccessful volunteers. These were: strength of personality, general competence as a teacher, cultural interaction, and facility in interpersonal relations. He concluded that personality attributes contribute the single most important category of variables which distinguish between the two types of people. Technical performance he saw as just one aspect of success and he asserted that it merely reflects a person's underlying personality. Harris used open interviews and, on their basis, developed field rating forms. Item content in these forms was restricted as much as possible to observable behaviors. The categories on which evaluations were made include personal qualities, interpersonal relations, interpersonal interactions, and general emotional maturity.

Mumford (cited in Benson, 1978), by means of her self-rating scale, studied the adaptation of United States Navy personnel in Japan. Ten dimensions of adjustment were delineated. These include language ability, initiative, mobility, cultural friendliness, readiness for new experiences, culinary adaptability, acceptance, appreciation of customs,

equanimity in the face of criticism, and cultural understanding. To validate her instrument the Navy Overseas Adjustment Scale (NOAS), Mumford used peer ratings as a criterion measure to classify people to "adjusted" or "nonadjusted" categories.

Benson (1978) provided a list of possible measures of adaptation based on the review of past literature. His list included language skills, communication skills, the nature and frequency of interactions with host country people, the presence or absence of reinforcing activities, friendliness, display of socially appropriate behaviors, job performance, attitudes towards host country nationals, general satisfaction, and mobility.

To determine criterion measures of effectiveness in overseas missionary performance, Kennedy and Dreger (1974) designed the Missionary in Action (MINA) descriptive checklist to measure behavioral attributes relating to personal-social work relationships of missionaries. A factor analysis of this checklist yielded eleven factors representative of attributes thought important by these researchers. These are: an understanding and acceptance of people and ideas, sensitivity to events around oneself, possession of time management skills, openness and acceptance of changes in people and social situations, possession of leadership abilities, commitment to Christ and the ability to share one's faith with others, humility and dedication, ability to adjust to cultural demands, concern about people with special needs, and healthy family and home relationships.

A study by Hammer, Gudykunst and Wiseman (1978) involved 53 American students at the University of Minnesota who had lived in another culture for at least three months and who had been identified by their peers as people who would have functioned effectively. They were asked to say how important each of 24 abilities was in facilitating their overseas functioning. These 24 abilities were arrived at through a review of literature, as being important in intercultural effectiveness. A factor analysis of the responses yielded three dimensions, namely, the ability to deal with psychological stress, the ability to communicate effectively and the ability to establish interpersonal relationships.

#### An Evaluation of Measurement Procedures Used

A wide variety of data collection tools have been used in these studies. These include questionnaires, interviews, observations, checklists, attitude scales, and other self report measures. Dicken (1969) reported that psychometric measures of personality and cognitive style have also been used to predict the success of Peace Corp community development workers. A few researchers have alluded to the difficulties involved in measuring intercultural adaptation (Dicken, 1969; Harris, 1973; Ruben & Kealey, 1979) and have shown sensitivity to the weaknesses inherent in these methods. Even though some have attempted to reduce the invalidities associated with these procedures, a brief evaluation of these procedures is still appropriate.

Psychometric measures of personality and cognitive style. Dicken (1969) reported that measures like the Minnesota Multiphasic Personality

Inventory (MMPI) and the Gutchfield Figures have been used to predict the success of Peace Corps volunteers. However, these measures have only shown moderate validity. It is thought that this is because their application in the area of intercultural behavior has only been on a trial and error basis to see if they would work. Their major weakness is that they lack published evidence of validity for this kind of prediction. What is needed is a methodical analysis of intercultural adaptation which, in turn, should lead to the construction of better instruments.

Self-report measures. Included here are many kinds of instruments such as questionnaires, attitude scales, checklists, interviews, and personality inventories, all of which require a person to give a report of his or her own experiences, feelings, or perceptions. These are valid only to the degree that the person is willing to express his or her self assessments honestly. There are problems also with response sets, that is, the tendency for certain people to respond in a certain pattern. Social desirability is the response set to present oneself in a favorable light. Acquiescence is the set to respond "true" no matter what the content of an item may be.

Interviews. An interview usually allows much greater depth than other methods if done skillfully (Borg & Gall, 1971). However, the interaction between an interviewer and the respondent is subject to bias from many sources. The data may be biased, for instance, by the eagerness of the respondent to please the researcher, the rising of antagonism between the two people, or the tendency of the interviewer to seek



out answers that support his or her preconceived notions. In the field there is always the problem of trying to establish the necessary rapport within a short period of time, as Ruben and Kealey (1979) pointed out. In the case where the interviewer is already known to the participants, the problem is that of interviewer bias. The "halo effect," that is, the tendency to form an early impression of the person being interviewed, operates strongly in such situations.

Observations. Observations overcome the limitations of self-report data, but they introduce their own difficulties. Sometimes the behavior patterns that can be objectively observed and recorded are only slightly related to the complex behavior being studied. The presence of an observer may change the observed person's behavior. Then there is always the problem of observer bias: An observer brings in all his or her past experiences, perceptions, emphases, and interpretations. These introduce much subjectivity, particularly if an observer is to make inferences and evaluations of a person's behavior. Therefore the reliability of observations is always a problem since rating is a subjective process. There are problems also with rating errors. Some observers tend to assign the same rating to everybody. Some have a tendency to rate everybody high (leniency errors). Others tend to rate everybody low, while others tend to rate everybody at the middle of a scale (error of central tendency). The halo effect introduces another error in observations. Observers may also get contaminated, that is, know the expected outcome and thus tend to selectively perceive the behaviors that confirm it. Supervisory ratings suffer from bias since supervisors have already

formed opinions of their subordinates prior to a study. Observations during training and selection periods have generally yielded low predictive validity mainly because of the short periods of observations (Harris, 1973). Peer ratings have the potential of creating problems in morale in training situations.

The aim of this dissertation is to construct a paper and pencil instrument. The major problem with those paper and pencil instruments used in research related to intercultural adaptation is that in most cases no attempts were made to obtain reliability or validity data prior to their application. What is needed is more empirical research of these instruments.

### Unresolved Issues

The lack of valid measurement procedures exists in part because very little is understood about the nature of intercultural adaptation. Benson (1978) has insightfully raised a number of unresolved problems with attempts to develop universal criteria of intercultural daptation, which may be summarized as follows:

1. Generalizability across situations. Different cultures and situations differ in terms of adjustment problems they pose for foreigners (Jones & Popper, 1972). Therefore it is possible that certain criteria might be important in some environments and not in others. It has been shown through studies of Peace Corps volunteers that not all overseas assignments lead to premature return of volunteers (Gullahorn & Gullahorn, 1963; Thomson & English, 1964).

2. Generalizability across populations. The research findings upon which these lists of criteria are based may not be generalizable across different subject populations. For instance, findings found with missionaries (Kennedy & Dreger, 1974) may not apply to businessmen (Shetty, 1971). The cultural background of the subjects may also be a relevant variable.

3. The variable nature of the dependent variable. Intercultural adaptation has been shown to vary with the length of time a person is exposed to a foreign environment (Gullahorn & Gullahorn, 1973; Kagitcibasi, 1978). Therefore it is possible that the criteria may also vary with the time of exposure to a foreign culture.

4. The nature of intercultural adaptation. It is not clear whether these criteria are separate and distinct from aspects of other constructs like job performance, general emotional adjustment, personality, or general ability. It is also not clear whether intercultural adaptation is a state of being or a process. In addition, it is not clear what role other factors, like a person's marital status, play in intercultural adaptation.

Very little is understood about the nature of intercultural adaptation, in part because of the lack of solid comprehensive theories of intercultural behavior. In the next section more approaches to this study will be examined. Most of these approaches are too rudimentary to be referred to as theories; they do, however, represent much needed attempts to explain intercultural adaptation theoretically. Ultimately what is needed is a theory that will help tie together the information

that is already available through studies such as those reviewed here. Such a theory should be able to provide plausible explanations of the characteristics that have been repeatedly linked to intercultural adaptation in many past studies.

### Communication Approaches

Communication approaches view intercultural adaptation as a communication process. Through communication, it is believed, a person acquires control over change in order to cope with a foreign environment. Therefore communication patterns are the best approximations of what a person experiences. They are considered both the process and the outcome of intercultural experiences. The first three approaches to be discussed here represent a group that stresses the role of cultural learning and cognition in intercultural behavior. The fourth differs from these in that it stresses the analysis of situational interactional communicative processes between individuals from different cultures.

### Cultural Self-Awareness

This approach emphasizes the idea that in order for people to function effectively in a foreign culture, they first have to be aware of their own subjective culture and recognize cultural influences in their own thinking. This should make it easier for them to suspend judgements in intercultural encounters.

Our assumptions about other people are a consequence of our own cultural conditioning. Kraemer (1975) asserted, "Often such assumptions

manifest themselves as projected cognitive similarity--that is when we implicitly assume that the other person's ideas and thought processes are similar to what ours would be if we were in their place (p. 13)." For as long as people assume that a thought pattern is universal, they will have no reason to look for cultural variation (Thiagarajan, 1971). Therefore cultural awareness should make them ready to suspect that the appearance of oddness may be caused by the cultural influence in their own thinking. An increase in cultural self-awareness should result in a greater awareness of one's ignorance of the other culture, and a corresponding increase in motivation to learn about it. Stewart (1976) pointed out,

Whenever the individual finds the strangeness of life in a foreign country leading to uncertainty, he adopts hypotheses from his own cultural pattern to fit the new situation. Since these interpretations based on his own cultural pattern dominate, he is not likely to suspend judgement and action till he can fully understand the strange ways. Because his own ways seem to him normal and natural, he is likely to regard those of another culture as undesirable, unnatural or immoral. (p. 320)

Hall (1959/1973) said that an understanding of one's own culture is both a prerequisite to and a consequence of involvement in a cross cultural encounter. He stated, "Years of study have convinced me that the real job is not to understand a foreign culture, but to understand our own" (p. 30). Becoming aware of one's own culture, Kraemer (1975) argued, involves more than knowing one's culture in terms of anthropological or sociological abstractions. It involves understanding those cultural aspects that are usually attributed to personalities or situational constraints. Hall (1959/1973) stated:,



The analysis of one's own culture simply makes explicit the many things we take for granted in our everyday lives. Talking about them, however, changes our relation with them. We move into an active and understanding correspondence with those aspects of our existence which are all too frequently taken for granted or which sometimes weigh heavily on us. Talking about them frees us from their restraint. (p. 140)

Stewart (1976) said that the need for a people to understand their own cultural pattern as well as that of the host culture does not mean that their insight must be explicit and articulate. This understanding may be implicit and the person may not be able to describe the relevant aspects of either their own or the other culture. They may have to perceive at some intuitive level.

Kraemer noted that it is difficult to recognize these cultural patterns in behavior because they are shared by people and thus do not stand out. They manifest themselves only in combination with other influences like a person's age, occupation, role, group membership, and so on. Also within intracultural situations most people really do not have any need to learn to recognize these cultural influences.

Thus Hall (1976/1977) introduced the concept of the "cultural unconscious," a concept similar to Freud's unconscious. He also referred to this as informal culture (Hall, 1959/1973). This is that part of our behavior that we take for granted, the part we do not think about. Usually these are mannerisms that were once learned informally, but which have become so much part of everyday life that they come automatically. Deviation from these informal norms are coupled with deep emotions. The cultural unconscious, like Freud's unconscious, not only controls people's actions, but can be understood only by painstaking processes of

detailed analysis. If mishandled these informal systems often lead to difficulties which are most apt to become aggravated since participants are not fully conscious of what is going on. There is no way of knowing where a leeway has been built. Individuals cannot describe the rules of their own cultures because these rules are not always explicit. Yet, in this unconscious lie the most important rules that govern behavior, the ones that control our lives:

The cultural unconscious, those out-of-awareness cultural systems that have as yet to be made explicit, probably outnumber the explicit systems by a factor of one thousand or more. Such systems have various features and dimensions which are governed by the order, selection, and congruence rules. These rules apply to the formative and active aspects of communications, discourses, perception (in all modalities), transactions between people, and the action chains by which humans achieve their varied life goals. Significant portions of extension systems still function out of awareness. Much of the formation, development, use, and change processes of these extension systems, therefore, fall within the scope of out-of-awareness culture and not only exert a hidden influence on life but are subject to the same rules and laws. (Hall, 1976/1977, p. 166)

Suggestions are given about how this cultural unconscious can be brought to the surface. Hall realized that the understanding of covert culture and accepting it on a gut level comes neither quickly nor easily. He said, "The investigation of out-of-awareness culture can be accomplished only by actual observation of real events in normal settings and contexts" (Hall, 1976/1977, p. 166). Therefore an awareness of the structure of one's system can be accomplished only by interacting with others who do not share that system. This awareness, Hall felt, cannot be achieved in the abstract because behavioral systems are too complex. "The rules governing behavior and structure of one's own cultural system can be discovered only in a specific context or real-life

situation" (Hall, 1976/1977, p. 51). Research attempting to bring informal patterns to awareness is the most meticulous, painstaking, and difficult of all. Even the best informants can never describe informal patterns even though they have been born and bred in a culture.

### Perspectives from Action Theory

Pearce and Kang (in press) suggested that acculturation occurs when one learns to live and move with acceptable proficiency in the symbolic and behavioral system of a second culture. These researchers view intercultural adaptation as a special case of communication competence. Competence is defined as the relationship between an individual and any given system of meaning and action which comprises a new culture. Competence is said to be "minimal" when a person does not know the logic of a new system. It is "optimal" when people can control the extent to which they are enmeshed in their old culture and in the new one. It is "satisfactory" if a person is totally within the logic of the new system. This approach views the concepts of intercultural adaptation and effective interpersonal functioning as one.

According to this approach the task then is to find out what the experiences or attributes are that best transform minimal competence to satisfactory, and satisfactory to optimal. Pearce and Kang (in press) suggested three ways to achieve intercultural adaptation. First, to be optimally competent, an individual must develop a differentiated rule structure which includes a representation of both cultures. Neither minimal competence nor satisfactory competence is considered ideal. On the other hand, intercultural adaptation starts with a realization that

existing systems, structures, theories, or choices in our own cultures do not produce similar communication frameworks in other cultures. Humans are not all the same. Rules or systems in one culture do not automatically have comparable meanings in another. What is logical to us is less so to members of other cultures because cultures have unique ways of perceiving their environments. This is the concept of subjective culture (Triandis, 1973). Therefore the goal is not to be so enmeshed into a new culture such that one rejects those aspects of one's culture not shared by the new culture.

Secondly, the individual should be able to exert control over which set of rules to apply in a situation. He or she must be able to move freely within and between the logical forces of the two cultures (Pearce & Kang, in press). This calls for an ability to exercise discretion and to make correct judgements in situations.

Thirdly, on the relationship between the individual's self-concept and the logics of the two cultures, it is suggested that optimally competent people may be either alienated or "transcendent." The most desirable adaptation produces what Pearce and Cronen (1980) termed "transcending optimal competence" rather than "alienated optimal competence." With the latter, people are able to critique the logic of either their own culture or the other culture or both, but also feel unable to live comfortably in either one or the other. If people have transcending optimal competence they will be able to live comfortably within both systems while simultaneously seeing themselves as outside them. Freedom is manifested through transcendence. Therefore people

who have transcending optimal competence identify themselves with the fact that they are enmeshed in multiple systems and are not fully identified by the meanings in any of them. The self is located simultaneously and unproblematically both within and outside each of the cultural systems of which they are a part. Minimally or satisfactorily competent persons identify themselves with the content and structure of one symbolic system.

In summary, what this approach stresses is that in order for an individual to achieve intercultural adaptation he or she must learn the rules and norms of the new culture. To do this a person has to start with an awareness of the subjective nature of culture. A person must have an ability to exercise judgement in the application of the newly acquired knowledge and to identify him or herself unproblematically with both cultural systems. All this calls for a substantial amount of psychological integration and maturity. Pearce and Kang (in press) noted that some schools of psychology view integration as an index of health and maturity.

### Intercultural Adaptation as Cognitive Complexity

The view of intercultural adaptation as cognitive complexity was proposed by Kim (1977, 1978). Kim believed that in studying intercultural adaptation, the emphasis must be on studying communication patterns, since, she said, they represent both the process and the outcome of culture contact.



Kim viewed intercultural adaptation as a change of an individual's perceptions, attitudes, cognition, and behavior. She defined acculturation as "the process of cognitive, attitudinal, and behavioral adaptation to the new cultural system" (Kim, 1978, p. 199). She said adapted individuals adopt new perceptual categories, rather than stereotypes, and will comprehend perspectives wider and more complex than their initial stereotypes. Curiosity and searching out are ways in which perceptual networks can be further differentiated, refined, and organized into a more sensitive information processing system. Rather than viewing this as a change that occurs at one point in time, Kim defined this as a tendency, a process dependent on many variables, personality ones and situational ones. She did not view intercultural adaptation as an additional aspect of personality--a trait--but as a process dependent upon development conditions. She acknowledged the idea that gregariousness, sociability, value orientations and many other personality variables may affect this process. The level of cognitive complexity achieved is not static, but is a product of life experiences from multidimensional perspectives. It is defined as the extent of cultural knowledge and familiarity with all segments of the host society, that is, institutions, subgroups, attitudes, beliefs, and values of the members, plus role requirements within the group and between group members. This cognitive structure allows individuals to perceive many goals and means of their attainment.

In her own research Kim (1978) isolated three communication variables which she said are useful in understanding intercultural behavior.



Intercultural adaptation, she said, is a process of change in a person's communication patterns at three levels: perceptual or cognitive structure, attitudes toward the host culture, and the degree of interpersonal and mass communication involvement. The perceptual structure she conceived of as the complexity a person has in perceiving the host society. It is the degree to which a person's perception of the host culture is differentiated, refined and organized into a more sensitive information processing system. She operationalized this as a person's ability to compare the two cultures in terms of interpersonal relationship patterns. A person's attitude towards the host culture she measured by means of a Likert-type attitude scale. Interpersonal communication involvement she assessed by the number of social acquaintances and friends from the host culture a person had.

Kim (1978) carried out studies of the adaptation of Korean immigrants in the Chicago area. She found that a person's overall reported satisfaction level in living in a foreign society is positively associated with his or her perceptual complexity, positive attitude towards the host society, and his or her behavioral participation in the communication channels of the host society. These findings replicated earlier findings (Kim, 1977) of a study also of Korean immigrants in the same area. Here she found support for her assertion that cultural learning occurs through communication, with interpersonal communication and mass media being the most salient channels. Involvement in interpersonal communication and the greater use of mass media both increase the complexity of a person's perception of the host culture. Other

factors that affect this perception include language proficiency, acculturation motivation, and accessibility to interpersonal communication channels. All of these factors are mediated by interpersonal and mass communication experiences. Between these two factors the former was found to have a greater effect on acculturation. This, Kim said, is because interpersonal encounters are intense and direct, and have detailed influence, whereas mass media present a somewhat stereotypic picture of the host society.

In these approaches intercultural adaptation is equated to intercultural communication. It is believed that competence is achieved when a person has an awareness or knowledge of the subjective elements in his or her own culture and in the foreign culture. This awareness is what frees the person from cultural restraint, and it is best acquired through actual participation in cross cultural relationships. Competence is characterized by the free and uninhibited movement of a person between cultures, general psychological integration and maturity. It is also characterized by a change in attitudes, perceptions and cognition.

#### A Multicultural Approach

This last approach to the understanding of intercultural communication represents a diversion from approaches that attempt to fit people into existing cultural systems, by searching for the laws that govern those systems. The emphasis is not on amount of knowledge or familiarity with a culture. This approach is an "open, biological, metabolic, fluid, process-oriented" one rather than a closed mechanical system. According to the approach, individuals ought to start with an awareness

of the subjective nature of culture. The purpose of culture is conceptualized as ". . . a system for structuring the environment and responses to it, for purposes of explanation, understanding, use, control and social interaction by people" (Casmir, 1978, p. 253). Culture is defined as being ". . . all common features developed and accepted by individuals for their own purposes as well as common goals, within a given setting" (Casmir, 1978, p. 252). Communication is seen as a "joint venture to which all participants contribute each at his or her own level, according to his or her own perceptions and needs . . . ." (Casmir, 1978, p. 254). It occurs in any situation where there is cognition, and if any kind of meaning is assigned by the participants. Focus is placed on the outlook of the individual human being since no matter what culture he or she belongs to, he or she still interprets culture in individual ways.

In studying intercultural communication, Casmir (1978) suggested a move from the study of established, identified, individual component parts or even systems to a model which focuses on the situational, interactional, communicative processes between individuals from various cultures. He talked about the conscious establishment of a third or "alternative realm," a situational supportive subculture developed through the interaction of its members. In this realm the participants have to avoid falling back into their own, best known, cultural patterns. This approach prevents people from assuming that they can understand common communicative process functions by studying the original, individual culture and national compound parts of any system. It forces

them in each instant to start with a basically new situational systems-model for what may be a significantly different situation. It takes into account the fact that everything that is said and done in a situation modifies what others say and do. Meanings are unique to the moment. Understanding depends on internal corrective adjustments which a culture has prepared an individual to discover. Both culture and communication are changing, creating and recreating component parts. This approach prevents the conclusion that an individual can discover rules of the total game instead of specific limited insights.

According to Casmir, this approach should make it possible to overcome alienation or threats most individuals experience when forced to submit to a "strange" culture, for the sake of getting along or for the sake of communicating. Participants should see themselves as being individually associated in the situational structuring of the actual communication system.

This is an approach not just based on the understanding of parts, but also on their functions as they interact in a situation. It leads to the creation of mutuality within an "alternative realm," rather than to the persuasion of others to see things "my way." Communication in this approach is not seen merely as a service function, but as an expression of humans engaged in a mutually beneficial supportive process. This alternative realm is not conceptualized as an idealized concept of sameness and does not involve submission by one or more of the participating cultures. This approach leads to adaptation, understanding, interaction, interdependence, and a feeling of meaningful participation.

It is based on the notion that the only real communication humans can experience has to be with other individual humans, even when they associate in groups.

### An Evaluation of Communication Approaches

A common thread runs through the first three communication approaches presented, namely, that intercultural adaptation is achieved when an individual establishes a certain specified relationship between him or her self and a foreign culture. The relationship studied is that between an individual and a system. As mentioned previously, the interest here lies in exploring relationships between at least two individuals rather than between an individual and a cultural system. While the approach applied in this dissertation incorporates various aspects of the approaches reviewed here, this researcher, like Casmir (1978), is convinced that meaningful relationships can only occur between individuals. Therefore any approach that necessitates the analysis of specific cultures is avoided. Instead, an attempt is made to answer the question, to what extent is a specific person A from one culture able to construe the construction process of another person B from another culture? In other words, to what extent is A able to see how B views the world, and to accept B and his or her way of seeing things? This is in line with personal construct theory (Kelly, 1955), which was employed in instrument development.

Approaches that require searching only outside the individual for answers are deliberately avoided. Culture analyses may have utility for



specific situations, but their scope is limited because of their specificity in the cultural environments analyzed. Most people do not have a choice of what cultures they have to interact with because of the cosmopolitan nature of many places in the world today.

The reluctance to undertake culture analyses is also motivated by an examination of the nature of cultural systems. First, cultural systems are not real entities. They are images in people's minds about the nature of reality (Hall, 1976/1977). Culture is a result of consensus and a perspective shared by members of a group (Kim, 1977). People perceive, invent meanings, and then treat their interpretation of things as if those interpretations were real. Because these meanings are widely shared as far as can be seen, people take them for reality, whereas they are ideas and explanations (Pearce & Cronen, 1980). Hall (1976/1977) said,

Such pictures are real in one sense because they are constructions of the human mind and they tell us about how that mind works as a product of a given culture. But they are not the mind, and they are not the real world either. (p. 214)

Casmir (1978) warned that cultural systems should not be endowed with superhuman qualities; in reality they are extensions of human beings and not the other way around. Many researchers have described cultural systems as being imbued with irrationality and paradoxes (Casmir, 1978; Hall, 1976/1977; Pearce & Cronen, 1980). Hall said that this institutional irrationality occurs because bureaucracy in all cultures has a potential to be counterproductive. He said, "By their very nature, bureaucracies have no conscience, no memory and no mind. They are self serving, amoral, and live forever" (Hall, 1976/1977, p. 218). Because



they occur as a result of a consensus of a group of individuals they possess less conscience than, and are morally and intellectually inferior to, the individuals who comprise them. Thus they are often irrational, paradoxical, incomplete, contradictory, and not always explicit (Pearce & Cronen, 1980).

By their very nature cultural systems are not static. They are continuously evolving. They also vary according to the situation. Hall (1976/1977) had this to say about their variability:

Ultimately what makes sense (or not) is irrevocably culturally determined and depends heavily on the context in which the evaluation is made. The result is that people in culture-contact situations frequently fail to really understand each other. (p. 214)

Second, individuals perceive and experience cultural systems in unique and individual ways. All these factors make culture analyses less fruitful for the purposes of this dissertation. One positive note about cultural systems, however, is that once established, they do function to enhance and to facilitate social order as well as interpersonal coordination to a reasonable extent.

In summary, there are problems associated with the first three communication approaches. For one, they assume that it is possible to master or to discover all the rules operating in any given system. They assume that the communication process between people from different cultures can be understood by studying their original cultures. Some of these issues are avoided by the multicultural approach suggested by Casmir. The aim in this dissertation is to employ an approach that is sufficiently abstract to describe the nature of intercultural

adaptation in all cultures, and yet specific enough to be applicable to any given situation.

It might seem that the approach offered by Casmir to the study of intercultural adaptation embraces all the elements sought in this project. Indeed a number of concerns already expressed with previously reviewed approaches are addressed by Casmir. However the problem with this approach is that it is too open, too fluid, and too situational. It does not provide leeway for making generalizations. According to this approach it is necessary to study each interaction and each situation on its own merit. Much stress is laid upon the uniqueness of each situation.

A theory is sought here that permits generalizations. A concern has already been raised about the generalizability of the findings of many studies that have attempted to investigate intercultural adaptation. Whatever theory is selected must permit generalizations in two dimensions: across individuals, and across situations. Such an approach should depart from phenomenological approaches, such as that espoused by Casmir, in this way. Let us look first at the first dimension--generalizations across individuals. The aim here is to be able to describe an individual, that is, conduct an idiographic study of him or her. However if the resultant description is to have much meaning, one should be able to make abstractions across individuals which will apply to groups of people or to humankind in general. Therefore a theory is sought that permits the abstraction of behavior from an

individual and then utilizes those abstractions in understanding the behavior of people in general.

Second, a suitable theory should enable one, after studying the behavior of a person in one situation, to understand and to make generalizations about his or her behavior in a variety of situations. Recognizing the fact that people change, the idea is to be able to make abstractions from a sample of demonstrated behaviors and to use such abstractions to predict future behaviors, rather than looking for a replication of behaviors of the same order in every situation.

An awareness of the existing division between individualists and situationalists (Pearce & Cronen, 1980) in communication theory, it may seem, compels one to take a stand in favor of one or the other. Situationalists, like Casmir (1978), stress that communicative behavior can be understood by a study of the situation in which it occurs, rather than through the study of characteristics of individuals. In the individualistic perspective the focus is on intrapersonal variables. It is based on the assumption that a person's behavior is responsive to his or her interpretation of the environment. In order to achieve the objectives of the present study, the individualistic approach is emphasized in this dissertation. The aim is to search for trans-situational personal characteristics rather than to study situational variables.

Pearce and Cronen (1980) have stated that competence ". . . cannot be described as a set of traits possessed by the individual in isolation from the context of particular systems. Competence is relational depending on both the characteristics of the person and the situation"

(p. 187). Jones and Popper (1972) also supported this notion. While the existent interaction between a person's individual attributes and the characteristic of a situation is recognized, this researcher also believes that the person possesses an internal structure or system of interpreting events that remains more or less stable across situations. Individual differences in these internal systems of meaning have a part in enabling some individuals to adjust easily in cross cultural situations and others to experience difficulty.

The individualistic and the situational orientations are not considered mutually exclusive, but as supplementary. The choice of which approach to emphasize should be dictated by the purpose or the goal of the exercise in which a researcher is engaged. There are situations in which one is more appropriate than the other. One goal here is to construct a general measure of individual differences with regards to intercultural behavior. There is a sense of helplessness in controlling or foreseeing the multitude of possibilities of situations likely to arise when different people behave in different cross cultural situations. If the goal was otherwise, the alternate strategy might very well be applied. For instance if the objective is to play a therapeutic role in the life of an individual who is experiencing difficulty in a foreign culture, an application of both approaches might be more appropriate at different points in the venture.

In the next section the role thought to be played by psychological theories in explaining intercultural behavior is presented. Past applications of psychological theories are reviewed. Design specifications

for a theory desired for the fulfillment of the objectives of this research are presented. A proposal is made regarding the role of personality in determining a person's intercultural behavior.

### Psychological Theories and Intercultural Behavior

The position taken in this dissertation is that intercultural adaptation is a phenomenon with which psychology must deal. Therefore the psychological realm is one within which this phenomenon is studied, as stated in the first chapter. Dealing with intercultural adaptation in this realm means that it is conceptualized in a psychological manner. This does not mean that intercultural behavior is a psychological phenomenon to the exclusion of its also being a sociological, anthropological, political, or physical phenomenon. George Kelly (1955) noted that the psychological realm is not preemptive. Intercultural behavior can be a psychological phenomenon and still belong to other realms; there are no clear demarcation lines. Consequently the psychological theory employed later subsumes aspects of intercultural communication theories reviewed in the preceding section.

### Design Specifications for a Suitable Theory

A psychological theory is sought that will enable the researcher to tie together the large amounts of information already available so that it can be understood all at once. An appropriate theory has to provide or suggest operational definitions of the variables central to this dissertation. It should lead to the realization and collection of new facts and be able to assist in controlling and altering a person's

intercultural behavior. It should assist in finding ways to help a person reconstrue his or her life such that he or she is able to adjust successfully in a variety of cross cultural situations. Therefore the theory must have some utility in cross cultural training. This is important if the instrument developed in this dissertation is to be useful in evaluating the impact of such training. The psychological theory selected has to provide a basis for making reasonably precise predictions regarding intercultural behavior. Kelly (1955) said ". . . a good theory should suggest predictions concerning people's behavior in a wide range of circumstances" (p. 24).

None of the existing psychological theories was written with intercultural behavior as its focus. Nevertheless, as Kelly (1955) suggested, if a theory is expressed in terms of abstractions of a sufficiently high order to be traced through nearly all the phenomena with which psychology must deal, then the theory will be useful.

The theory chosen must meet all the other standards of a good psychological theory outlined by Kelly (1955, pp. 22-45). It should be fertile in producing new ideas, and must produce testable hypotheses which in light of experimentation turn out to be valid. It should be modifiable and expendable so that there will be freedom to abandon its hypotheses or irrelevant assumptions when predictions do not materialize. After all, as Kelly said, a theory ". . . is a tentative expression of what man has seen as a regular pattern in the surging events of life" (1955, p. 19).



A chosen theory has to address the fundamental issue of what propels a person to action in the first place, accounting for the direction his or her movement takes or which way he or she will turn when confronted with a choice situation. The theory has to explain individual differences, or why some people when placed in a cross cultural situation adjust without difficulty, while others experience great difficulty, even when they have received the same preparatory training.

### Personality and Intercultural Adaptation

A theory of personality is sought here to explain why people adjust differently when exposed to the same cross cultural situation. Personality theories focus not just on mental functions or separate acts of behavior but on individuals and why they behave as they do. They cut across the whole gamut of human life. It is proposed in this dissertation that the diverse reactions of different individuals exposed to the same cross cultural situation result from differences in each personality organization, among other things.

Various authors have suggested different approaches to the definition of personality (Arndt, 1974; Forgus & Shulman, 1979; Monte, 1977; Sapir, 1949). The definition of personality assumed in this dissertation is one that Sapir (1949) classified as sociological. According to this conception, personality is defined as "the totality of those aspects of behavior which give meaning to an individual in society and differentiate him from other members in the community, each of whom embodies countless cultural patterns in a unique configuration" (Sapir, 1949, p. 164). This view of personality is concerned not only with

those aspects of behavior which can be classified as being in the psychological realm; it also refers to the individual conceived as a given totality of physiological and psychological reaction systems. Again, no attempt is made to draw demarcation lines between psychological, physical, and other realms. This definition also stresses the integrative nature of a variety of components of the total personality. The notion of the organization rather than the aggregate of personal attributes or traits is stressed: personality is viewed as a pattern of traits. Traits are seen as merely descriptive tools rather than concepts that can be used to explain behavior. Lastly, while the individual is seen as a social being, this definition also stresses the distinctiveness of personality and the uniqueness of the individual. It focuses on the way in which people differ qualitatively rather than on what they have in common. Personality therefore is that recurrent theme or unique pattern in a person's behavior. It is believed here that there are real structures, different but not unrelated to physical ones, inside people, that determine their behavior. These structures can be assessed by searching for patterns of cognition in individuals. This dissertation represents an attempt to construct an assessment tool which measures these structures by obtaining a sample of constructs an individual applies to interpret certain events in life.

Personality determines to some extent whether a person will adapt successfully in a foreign cultural environment or not. This is not to say that personality is the only factor that affects adaptation. There is a potential for the existence of a host of situational or incidental

factors working directly or indirectly to influence the adaptation process. For instance, some of the literature reviewed earlier indicated that a person's adaptation process is influenced by his or her accessibility to interpersonal communication channels. The presence or absence of a social circle, friends or a family, transplanted from the person's old culture in a foreign situation tends to reduce the effects of culture shock. This is because the presence of such people neutralizes the intensity of social interactions with host nationals, and also reaffirms aspects of the self shaken by the new experiences (McCoy, 1980). The duration and intensity of a person's interactions with host culture members are therefore important factors. If people are consistently surrounded by none but members of the host culture, they experience greater anxiety and threat because they constantly feel others expect them to change their systems of anticipating events. The extent to which host culture members demand conformity of the foreigner is another important factor. In addition, more concrete factors, like the degree of wealth a person owns, may function indirectly to affect the amount of stress associated with culture shock and consequently the whole adaptation process. The economic instability of a person can only increase anxiety and stress normally associated with settling down in a new environment. Financial stability, on the other hand, can be expected to have the opposite effect. These are just a few of the factors that might work to influence a person's adaptation process at any one time. Therefore an evaluation of a specific person's adaptation process needs to delve deep to expose whatever situational factors are at play.

Of the many factors believed to affect adaptation, personality is one that lies within the individual, and hopefully within his or her control. Through purposive manipulation, in a training situation, of an individual's personality or construction system, it is possible to influence the adaptation process to the person's favor. An analysis of how personality influences intercultural adaptation may lead to insights into the prediction of intercultural adaptation in humans.

The link between personality and adaptation is not new. Many researchers already mentioned have linked personality characteristics to intercultural behavior (Ackermann, 1976; Brein & David, 1971; Gardner, 1962; Harris, 1973; Shetty, 1971; Stoner et al., 1972). Behavioral theorists like Triandis (1973) have also brought personality into their models of intercultural behavior. Behavioral theories are discussed next.

### Behavioral Theories and Intercultural Adaptation

Behavioral theories have been applied widely in the study of intercultural behavior.

A major proponent of behavioral theories in intercultural behavior has been Triandis (1972, 1975). In his approach to intercultural adaptation, Triandis combined three approaches. These are the stimulus-response or reinforcement paradigm, the paradigm emphasizing cognitive determinants of actions, and the paradigm emphasizing customs, norms and roles. He pointed out that unpleasantness in intercultural interactions occurs because of either external or internal factors. External factors

can be real differences in the goals of participants, as when one party is exploited by the other. This he termed realistic conflict. Internal differences are those due to variations in the perception of the environment. Very often external factors lead to internal causes of conflict.

Triandis attributed some problems in intercultural interactions to the fact that people bring different expectations into a situation. A major problem is that each person is unable to control the behavior of the other because he or she does not understand the causes: how the other analyzes his or her social environment and what constitutes a reward for the other. He stated,

Interpersonal competence means, in part that a person is able to reinforce the other. In order for a person to reinforce another he needs to control resources. He also needs to know what is reinforcing to the other. In intercultural encounters, part of the difficulty stems from ignorance of what is reinforcing to the other. One knows what is reinforcing to the other in part, if one knows his subjective culture. (1973, p. 57)

Intercultural hostility, Triandis said, does not just occur when norms and roles are different, but also when the strengths of those norms differ. Therefore success in intercultural interactions will occur when the following conditions exist: (a) Participants bring into a situation similar expectations, similar role definitions, and similar strengths in the connection between norms, roles and behavior, and (b) Participants know how to analyze the behavior of each other, know what is reinforcing to the other, that is, his or her subjective culture, and focus on the rewards and punishments which the other will experience for particular

behaviors. This also means that participants are able to make isomorphic attributions of each other's behaviors.

Triandis offered a paradigm for research that links key determinants of interpersonal behavior to each other and to behavior. This is in the form of a complex mathematical model given as follows:

$$P_a = [\alpha H + \beta(BI)](Ab)$$

where  $P_a$  = probability of an act

$H$  = habit

$BI$  = behavioral intentions

$Ab$  = ability

$\alpha$  and  $\beta$  are weights.

In other words, behavior is a function of habits, behavioral intentions, and ability, or the extent to which a person is skilled or capable of performing the behavior. What weight is assigned to habits and behavioral intentions is a function of the personality of the person, his or her culture, and the social setting in which the behavior occurs.

Triandis said that much behavior may very well be under these influences. Other equations of the paradigm spell out the determinants of behavioral intention as a function of social pressures, affect towards the behavior, and perceived consequences of the behavior. He also discussed methods for the measurement of each of the variables of the paradigm and examined several studies in its support.

According to this approach, then, intercultural training should increase the cognitive complexity of individuals. It increases a person's ability to select from the social environment the cues that the other



uses as causes of interpersonal behavior. This means that the trainee will predict correctly the behavior of the other person. Successfully trained persons therefore can be determined by their ability to make isomorphic attributions. The procedure of culture training developed by Triandis and his associates, called the culture assimilator, is consistent with these views.

In this technique the trainees are presented with a series of critical incidents, that is, stories in which there is conflict or a misunderstanding between a member of one culture and a member of the target culture. The trainees are then asked to select a reason, from four alternatives, for the foreigner's behavior. They are provided with feedback concerning whether or not they are correct and why they are correct or incorrect.

Weldon, Carlston, Rissman, Slobödin, and Triandis (1975) listed objectives of training through the culture assimilator. They said trained people should make attributions which are isomorphic to those made by members of the target culture. They should perceive the behavior of host culture members as more rational than they perceived it before training. Trained people should emphasize external behavior--that is, norms and consequences of behavior rather than internal determinants--to a greater extent than untrained people. They should stereotype host culture members less than untrained people and have more favorable attitudes towards them. Lastly, trained people should be perceived by members of the host culture as more desirable coworkers than the untrained.

Methods and procedures used to evaluate this kind of training are consistent with these objectives. The attribution test was used by Weldon et al. (1975). It was designed to study the way people make judgements about the causes of other people's behaviors. Participants were asked to indicate the probability that various causes explained people's behavior in a story involving a conflict between two people. The Test of Intercultural Sensitivity (TICS), developed in conjunction with the culture assimilator, was also used in this study. This instrument consists of critical incidents selected from the pool originally developed for the assimilator. Each incident is followed by a question that asks why the person in the incident behaved as he or she did. This test uses the multiple choice format with four options. The first option is one previously found popular with the respondent's own cultural group, the second is one found popular with the foreign cultural group, the third is one found popular with both groups, and the fourth is one found popular with neither. Responses are scored according to the percentage of foreigners who had agreed that each was a good answer.

Other tests used in this study include the Employee Evaluation Test, which is a modified in-basket technique designed to determine whether or not an individual would pay attention to relevant aspects of a complex stimulus when evaluating the performance of an employee belonging to the foreign culture. The Multifactor Racial Attitude Inventory was used to assess attitudes towards foreign culture members, as well as the Personality Judgement Inventory, a questionnaire to measure the tendency of participants to stereotype foreign culture members.

Benson (1978) discussed a slightly different behavioral approach to the study of intercultural adaptation. This approach, propagated by David (cited in Benson, 1978) and Tucker (cited in Benson, 1978), focuses on the reinforcing or aversive properties of specific experiences a person exposed to a foreign culture has. It is said that poor adjustment is due to the removal of reinforcing situations. A training approach slightly different from the one suggested by Triandis is suggested. This approach is based on teaching the individual how to attain reinforcements and to avoid change, or neutralize punishments, how to transfer or modify present reinforcing systems, and how to develop or learn new reinforcers appropriate to the new cultural environment. Rather than explicating criteria for the measurement of one's success in intercultural interactions, this approach suggests the matching of individuals to environments with readily reinforcing aspects.

#### Comments Regarding Behavioral Theories

Behavioral theorists assume that a person's behavior is influenced solely by external consequences, which in the case of intercultural interactions, is other people's behavior. Triandis (1973) said that if a person knows the subjective culture of another and behaves appropriately by performing only those acts that are reinforcing to the other, intercultural conflicts will be reduced. He suggested that a successfully trained person equipped with a complete array of appropriate behaviors will be able to predict correctly, and thus control, what the reaction of his or her host counterparts will be, most of the time. What this view does not address is the question of whether it is what we

do that makes people react to us the way they do. Speaking of the knowledge of what actually makes other persons react the way they do, Triandis himself pointed out that ". . . this kind of knowledge, in most human relationships is still very limited" (Triandis, 1973, p. 60).

Therefore in most interactions we do not know, nor are we likely to ever know for sure, which aspects of a situation motivate resultant behavior.

Other theorists (Bandura, 1974) have suggested that external consequences are not the sole determinants of behavior. People partly regulate their actions. They do not just react to other people's behavior or to the environment; they also act upon it. They regulate their actions by self-produced consequences or anticipations, not just rewards and punishments. They possess self-reactive functions and a capacity for self direction. Any action, reaction, or statement can be viewed as having two sets of outcomes: self-evaluative consequences, and external outcomes, the nature of which varies according to the perceptions of the receiver. These may operate either as supplementary or as opposing influences. External consequences exert the greatest influence on one's behavior when they are compatible with self-produced, self-perceived consequences. This is why people always feel more comfortable with those who share similar standards of conduct or similar cultures. Conflicts result when people are rewarded for conduct they personally devalue or when they are punished for highly valued behavior, as is likely to happen to one exposed to a foreign culture. The position taken by behaviorists therefore misses the idea offered by Bandura (1974) who asserted:

It is true that behavior is regulated by its contingencies, but the contingencies are partly of a person's making. By their actions, people play an active role in producing the reinforcing contingencies that impinge upon them. Thus behavior partly creates the environment, and the environment influences the behavior in a reciprocal fashion. (p. 866)

Bandura, in his social learning theory, also said that many of the things we do are designed to gain anticipated benefit. Man is largely ruled by anticipated consequences. When what we believe to get differs from what we actually get, consequences have little control on behavior. Then there is chaos, confusion, and culture shock. Personal construct theory, to which this researcher later turned for assistance in understanding intercultural behavior, has this view as its fundamental postulate.

Some of the expressed differences of opinion of different theorists are based on differing philosophical beliefs on the issue of determinism and human freedom (Bandura, 1974). The earlier behaviorists are environmental determinists, and their view inevitably influences the way they conceptualize learning. They are more inclined to using training methods that primarily serve to promote institutionally prescribed patterns of behavior and to manage conduct. In cross cultural training, this is reflected in training approaches such as the culture assimilator already described. On the other hand, people who advocate personal determinism are more likely to utilize and develop self-directing potentialities in humans.

On the question of freedom versus determinism, Bandura (1974) pointed out,



People may be considered partially free insofar as they can influence future conditions by managing their behavior. Granted that selection of particular courses of action from available alternatives is itself determined, individuals can nevertheless exert some control over the factors that govern their choice. (p. 867)

Thus a realization that people partly regulate their own behavior and that their behavior is influenced also by prior conditions is most likely to result in a healthy balance between attempts to manage conduct and attempts to develop skills in self-regulation.

In intercultural behavior, behavioral theories lay emphasis on culture analyses, that is studying maps of cognitive structure of samples of people and then generalizing to groups or cultures. Earlier in this chapter a rationale was provided for avoiding culture analyses for the purposes of this study. Behavioral theories also lay emphasis on training people in cultural similarities and differences in order to enhance their cognitive sophistication regarding the other person's culture, its norms, roles, and the strengths of those norms and roles. Because the emphasis is on similarities and differences between identifiable cultures and subcultures, this approach fails to account for differences and similarities within those cultures, as well as for the failures in interpersonal interactions between members of the same culture.

There is a general tendency to approach intercultural behavior as though it were a different process from intracultural or ordinary interpersonal behavior. The position taken in this dissertation is as Sarbaugh (1979) stated, that the variables that operate are the same for both intercultural and interpersonal interaction. In both the concern



is with characteristics of people and the relationships among them. The relationship between these two concepts is understood better if they are visualized as being located on points along a continuum, the opposite ends of which tend towards infinity, as Figure 1 indicates.

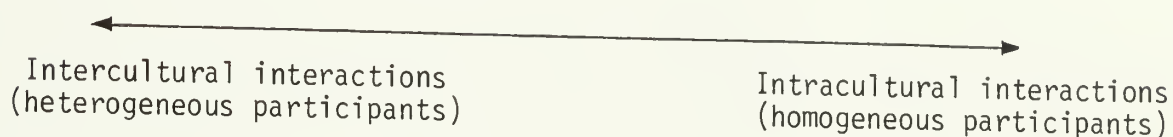


Figure 1. The relationship between intercultural and intracultural interactions.

According to this visualization people are considered heterogeneous or homogeneous not in terms of conventionally used criteria like race, age, sex, etc., but in terms of commonality in the way they construe life's experiences, and in the way they perceive what is expected of them by others. The differences in the outlook and in individually perceived expectations of the two people determine whether the interaction between them is intercultural or intracultural. Interactions between people fall on different positions on the continuum depending also on the area of focus or the content of the interaction. The lack of end points in this continuum signifies the fact that no two people are exactly alike in their construction of all experiences, and no two people differ completely in their construction of all experiences. This holds true of cultures as well, as Hoijer (1976) said:

No culture is wholly isolated, self contained and unique. There are important resemblances between all known cultures--resemblances that stem in part from diffusion (itself an evidence of successful

intercultural communication) and in part from the fact that all cultures are built around biological, psychological, and social characteristics common to all mankind. (p. 152)

This model is particularly appealing because it accounts for all human interactions. The concern with behavioral theories is that they fail to explain failures in communication between members of the same so called cultural groups.

This dissertation searches for those attributes in humans that are significant in distinguishing between those who are likely to adapt successfully in intercultural situations from those that are not, if all other factors could be held constant. The idea is to look for those systems or structures within individuals that affect intercultural behavior. As mentioned earlier, this may prove more efficient in the long run, given the cultural complexity of modern societies.

In the next chapter an alternative psychological theory for the study of intercultural behavior is presented. The behaviorist orientation is abandoned, not because it does not work, but because the interest here is in those aspects of a person's behavior that are not accounted for by inputs to the person or his or her known past history or reinforcement.

# CHAPTER III

## PERSONAL CONSTRUCT THEORY

### An Overview

Because it meets the specified intentions and specifications of this study, Kelly's personal construct theory (Kelly, 1955) was selected to explain intercultural behavior. It is a personality theory whose original focus of convenience is in the area of human readjustment to stress. It is a general theory of all psychological processes. Its range of convenience covers the area of human personality and the problems of interpersonal relationships.

Personal construct theory has been applied to the study of intercultural behavior only to a limited extent. Perry (1978) applied it in the study of frustrations in transcultural contacts and conflicts between people. He pointed out the utility that the sociality corollary of the theory has in these areas. McCoy (1980) employed personal construct theory and its Repertory Grid technique to study intercultural "culture shocked" marriages in Hong Kong.

Without direct application of personal construct theory, Shepherd (1971) expressed ideas similar to the ones found in this theory. Shepherd stated that people have a personal perspective which provides them with a background for understanding events, interpreting behavior and predicting the course of events. This personal perspective is a result of an interaction of individual life with social life. A person views the world from his or her perspective and is constrained to

routinize the world around him or her. No one can fully appreciate another person's perspective. A person is engaged in a process of typifications, that is, forming generalized judgements about the world. A person tends to feel that the world revolves around him or her because one's perspective limits perceptiveness and sensitivity. People reflect a shared perspective with other members of their groups.

Shepherd then discussed what he called "routinization." People reduce to routine many decisions they are faced with daily in order to increase those events which can be predicted. Too much surprise and too little routine leads to chaos and the disruption of daily life. People use typifications, which are generalized conceptions of what others are like and how they are likely to behave. Typifications are not developed to test hypotheses but to provide meaning consistent with expectations. Shepherd suggested that people may function well within their groups, but in order to understand those different from themselves they have to adopt what he termed a "scientific attitude," of which he provided a description.

Personal construct theory is a theory of meaning, attempting to understand the processes by which a person makes sense of his or her environment. It is an objective theory about each person's individualized and possibly subjective theory of reality. The basic unit of analysis is the individual. The theory attempts to understand a person's cognitive processes in order to understand present behavior and to be able to predict future behavior. It provides an explanation of how individuals differ. The outlook of an individual person is seen as

being a real phenomenon, and therefore the theory formulates laws and principles to explain it, before proceeding to study a group of people or people in general. This way Kelly combined the so called neophenomenological approaches with the more conventional approaches.

However this focus on the individual does not exclude the vitality of the role of social processes, or the relationship between an individual and his or her environment, be it social, physical, or otherwise. The theory provides a basis for understanding similarities between individuals, such as exist when people share a culture--why they tend to think and act alike. In the same context it provides an explanation of failures in interpersonal interactions even when participants are of the same cultural group. The theory suggests the prerequisite for role relationships and effective interpersonal and, with this application of it, intercultural effectiveness.

This theory does address the fundamental question of the genesis of psychological processes, or what propels a person into action in the first place. Other theories have introduced the notion of energy to explain this. Within personal construct theory, a person is viewed as an organism already in action, as a form of motion. There is continuous movement towards the anticipation of events, and this movement is the essence of human life itself. Unlike in behavioral theories, a person is viewed as an active organism who has some control over his or her destiny, rather than as a passive respondent to environmental contingencies. This theory does not specify that the person seeks pleasure or has special needs or that there are rewards and punishments. The

direction a person's movement will take in a choice situation is determined by the way in which he or she anticipates events.

In this way the theory addresses the issue of change, of how and why people change or resist change. Proctor and Parry (1978) said Kelly did justice to the complex dialectical views of change. This theory subsumes in it a theory of learning. To Kelly, learning involves a process of validation or invalidation of hypotheses at its core. Emphasis is laid on the adaptive nature of personality.

Personal construct theory addresses the philosophical issue of human freedom versus determinism discussed in the second chapter; that is, the extent to which people are believed to be constrained by the dictates of their culture. Kelly resolved this issue by saying that the two poles are simply different sides of the same coin. People do not just receive cultural values, but these values are built up anew by each individual. People are not free from conditions, whether they be physical, social, etc., but they are free to take a stand towards these conditions (Proctor & Parry, 1978). Kelly criticized behavioral theories for their assumption that a person is an inert being who needs to be pushed into action only by external stimuli. In this theory the individual is afforded with much respect and faith that change lies within him or her (Proctor & Parry, 1978).

Lastly this theory is most appealing for the purposes of this study since it offers an approach to the measurement and prediction of



behavior. Measurement and prediction are embodied in it, as is shown in the next section.

## The Theory

### Prediction and Control

Like all psychological theories, personal construct theory is concerned with predicting future behavior and controlling it. It deals with the question of how people think and behave as they do. By understanding how people think, their present behavior can be understood and the chances of correctly predicting their future behavior will be enhanced.

### The Individual as a Scientist

In the realm of this theory the individual is given the status of a scientist, always seeking to predict and control the course of events. The philosophical basis of Kelly's model is his principle of constructive alternativism, which states that all our present interpretations of the universe are subject to revisions or replacement. There are always some alternate constructions available to choose from in dealing with the world. People look at the world through transparent patterns or constructs which they create or choose and then test against reality. These constructs are subject to change as they are validated.

### Fundamental Postulate

The fundamental postulate of the theory states that a person's processes ". . . are psychologically channelized by the way in which he

anticipates events" (Kelly, 1955, p. 46). People, like scientists, seek prediction and wish to have their future better represented. The theory further states that a person ". . . anticipates events by construing their replication" (Kelly, 1955, p. 50). People erect abstractive structures on the basis of similarity and contrast observed and experienced. They look at events and try to find something that repeats itself. These abstractive structures may not even be able to be articulated.

### Individual Reality

The basic unit of analysis in this theory is the individual, rather than any part of him or her or any groups of persons. The ultimate purpose is to measure differences between individuals. Regarding individual differences, this theory states that "Persons differ from each other in their construction of events" (Kelly, 1955, p. 55). This is so not only because the events they choose to anticipate differ, but because there are different approaches to the anticipation of the same events. People also differ in the ways they organize their construction of events.

### Social Reality

By recognizing individual differences, this theory does not imply that an individual's construction system differs completely from everyone else's--there are overlaps. An approach is provided for the understanding of similarities in people which is consistent with the theory's fundamental postulate. Kelly said, "To the extent that one person

employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person" (Kelly, 1955, p. 90). It is possible for two people to be involved in the same event, but because they construe it differently, to experience it differently; they anticipate events differently and therefore behave differently. It stands to reason therefore that if two persons employ the same construction of experience, their psychological processes will be similar.

On this basis the theory offers an explanation of the concept of culture and interpersonal and intercultural communication. Kelly (1955, p. 93) noted the existence of three general conceptions of culture. In the first, culture refers to people grouped according to similarities in their background and upbringing. In this conception cultural differences and similarities are understood in terms of the environmentalist approach of behaviorists. The second conception of culture refers to similarities in what group members expect of each other. Gullahorn and Gullahorn (1963) expressed this when they conceptualized intercultural adaptation as being the achievement of a complementarity of role expectations between people from different cultures. Kelly said this too is an environmentalistic conception since expectations of others are seen as controllers of behavior.

A conception of culture consistent with Kelly's theory explains it in terms of similarity in what the individual perceives is expected of him or her. What is important is what persons believe that other persons believe (Pearce & Cronen, 1980). The emphasis here is placed on

the individual's perceptions rather than on the expectations of others. Thus cultural similarity is not only due to similarity in outlook, but is also due to a common set of anticipations regarding the expectations of others.

What it means to be interculturally effective then follows from this conception of culture and cultural similarities. In order to interact effectively with others, people do not just have to view the world as others do, but they must also be able to see how those others view the world. A prerequisite for sociality therefore is not just similarity of outlook. Sharing a culture in itself is not enough or even essential. What is essential is expressed in the following words by Kelly (1955):

In order to play a constructive role in relation to another person, one must not only in some measure, see eye to eye with him, but must, in some measure, have an acceptance of him and his way of seeing things. We say it in another way: the person who is to play a constructive role in a social process with another person need not so much construe things as the other person as he must effectively construe the other person's outlook. (p. 95)

This same idea is expressed by Hall (1976/1977) who said,

The reason man does not experience his true cultural self is that until he experiences another self as valid, he has little basis for validating his own self. A way to experience another group is to understand and accept the way their minds work. This is not easy. In fact, it is extraordinarily difficult, but it is of the essence of cultural understanding. (p. 213)

### Intercultural Adaptation

Kelly's concept of sociality spells out the meaning of intercultural adaptation. When a person's behavior follows from his or her perception of how another thinks, according to personal construct theory, that

person has assumed a role in relation to that other person. This is expressed in the sociality corollary which states that "To the extent that one person construes the construction processes of another, he may play a role in the social process involving the other person" (Kelly, 1955, p. 95). In this context a role is ". . . a psychological process based upon the role player's construction of aspects of the construction system of those with whom he attempts to join in a social enterprise" (Kelly, 1955, p. 97). "It is a pattern of behavior emerging from the person's own construction system, rather than primarily out of his social circumstances" (Kelly, 1955, p. 98). A person may have a construction of how another sees things, and thus play a role in the social process involving that other person, without the other reciprocating the action. However when two people's construction systems overlap a great deal, as when they share a culture, it is more likely that they will understand each other.

Therefore a person's social development involves the gradual acquisition of skills in making inferences about the personal construct systems of other people in social situations. Intercultural adaptation, then, is the extent to which a person can play a role in the social process involving another person from another culture. It is the extent to which a person can construe the construction processes of another person from another culture. As has been mentioned, this will be easier when the psychological processes of the two people are similar in structure and content. What has to be similar is their construction of experience. Fransella (1977) said, "When we construe in relation to the

sociality corollary, our constellatory or preemptive construing in relation to the commonality corollary ceases to occur" (p. 42). More is said about this later in this chapter.

### Personality Development

Personal construct theory emphasizes the adaptive aspect of personality, rather than viewing personality as an invariant stable reactive system. Kelly (1955) stated that "Each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs" (p. 56). A person's construction system or personality is not static but is continuously taking new shape, with elements being grouped and organized such as to minimize inconsistencies. Constructs are inconsistent if they lead to the anticipation of incompatible events. Sometimes people will choose to conserve their systems if their anticipation of events is more effective with it, even though this may have harmful effects on them. However, Kelly (1955) said, ". . . it is not consistency for consistency's sake that gives man his place in the world of events. Rather it is seeking to anticipate the whole world of events and thus relate himself to them that best explains his psychological processes" (p. 59). In a conflict situation people will choose that alternative which seems to provide the best basis for anticipating ensuing events, thus defining and extending their systems.



### What About Inconsistencies in Behavior?

Inbuilt into this theory is provision for day to day or situational inconsistencies in people's behavior. This has implications for the measurement and prediction of behavior. This explanation is in the form of the Fragmentation Corollary which states that "A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other" (Kelly, 1955, p. 83). Kelly (1955) also said, ". . . new constructs are not necessarily direct derivatives of, or special cases within, one's old constructs. We can only be sure that the changes that take place from old to new constructs do so within a larger system" (p. 83).

Kelly thus warned that in appraising behavior, currently operating construct systems should be sought rather than explaining specific behaviors as derivatives of immediately antecedent ones. In this sense the theory takes an ahistorical approach to assessment. This does not mean however that this theory is unconcerned with past history. Kelly recognized that it is necessary, at times, to study ways in which an individual has viewed events in his or her own life, in order to make inferences about present views; how people view and conceptualize their pasts may determine their present behaviors. The theory suggests the practice of basing predictions of behavior upon a knowledge of an individual's superordinate, not subordinate, constructs. There are less inconsistencies as movement is made from the specific to the abstract.

### Change: How Does It Come About?

Personal construct theory incorporates within it a learning theory. Learning is not a special case of psychological processes. The theory of learning offered has implications for the planning, the execution, and evaluation of all types of training programs. Learning, a reconstruction, occurs if a person's construction system does not permit him or her to correctly anticipate events. This will happen, for instance, when a person is involved in a foreign culture with different customs, norms, and different ways of doing things in general. A person in this situation does not have full knowledge of what behaviors or events to anticipate. For instance the construct "assertive and feminine" lies outside a person's range of convenience if he or she comes from a culture in which females are not supposed to be assertive. In a familiar environment a person's construct system keeps on being validated through experience, it is retained, and there is no need for new learning.

Kelly (1955) stated that, "A person's construction system varies as he successively construes the replication of events" (p. 72). His theory of learning combines this assumption with the one stating that the course of all psychological processes is plotted by one's construction of events. He stated, "As one's anticipation or hypotheses are successsively revised in the light of the unfolding sequence of events, the construction system undergoes a progressive evolution. The person reconstrues. This is experience" (p. 72). Construing is a refinement process and experience is made up of the successive construing of

events. It is not what happens around us that makes us experienced, but rather it is our construing and reconstruing of what happens, as it happens. Therefore in educational settings the problem is not so much that of knowing how many or what kind of stimuli to provide, but rather how the learner phrases the experience. Emphasis should be on finding out what the learners are thinking or how they construe the stimuli they are presented with. This idea leads naturally to an explanation of why different people experience and consequently learn different things from a single event. For instance when a number of people are exposed to a foreign culture, they will learn to function in that culture in different ways; they experience that culture differently because they construe events differently. What is of interest in this study is to be able to determine the differences between the construction systems of those who adapt successfully and those who fail to adapt.

### Constraints to Learning

In addition to explaining how learning occurs, personal construct theory specifies the conditions under which learning will not occur. This is stated in the modulation corollary which states that, "The variation in a person's construction system is limited by the permeability of the constructs within which the variants lie" (Kelly, 1955, p. 77). For instance, a person's construct of good versus bad might be permeable to permit him or her to judge certain aspects of a foreign culture to be good, and others to be bad. Permeability in this sense is the capacity to embrace new elements without a major shift in one's construction system.

Kelly also stated the conditions under which new constructs can or cannot be formed. He said new constructs are formed easily if a person is in a situation in which he or she is able to try out new behaviors and tentative constructions of the roles of other people. New constructs are formed only when there is data available for their validation; they are not formed when one lacks a laboratory in which to try them. This is consistent with the view expressed by Hall (1976/1977), discussed in the second chapter, that real intercultural learning cannot be achieved except through direct involvement in cross cultural situations.

Kelly also said that new constructs are formed with less danger of paralyzing effects if they are approached in contexts which do not involve danger to the self or to the members of one's family. The presence of threat, death, or injury will limit the formation of new constructs. These are situations of realistic conflict.

What happens if a person's superordinate construction system is too impermeable to tolerate persistent incompatibilities? The answer to this question is provided by the choice corollary which states that, "A person chooses for himself that alternative in a dichotomized construct through which he anticipates the greater possibility for extension and definition of his system" (Kelly, 1955, p. 64). Therefore the individual will extend his or her system making it more comprehensive, increasing its range of convenience, and at the same time, making it more clear cut and explicit. These are efforts to work out incompatibilities in the construction system by manipulating the system's range of convenience. Extending one's system makes it more comprehensive and

increases its range of convenience, thus making more and more of life's experiences meaningful. Definition means a tendency to make one's system more explicit and clear cut in such a way as to enhance one's anticipations.

### The Analysis of Cognitive Processes

Two corollaries are presented by Kelly which provide an approach to the analysis of human cognitive processes. One of these is the dichotomy corollary which states that, "A person's construction system is composed of a finite number of dichotomous constructs" (Kelly, 1955, p. 59). The other is the range corollary which states that, "A construct is convenient for the anticipation of a finite range of events only" (Kelly, 1955, p. 68). Kelly assumed that people think in dichotomies, based on the observation that much of language and thinking implies contrasts, although not always stated thus. A construct is a way in which at least two things are similar and contrast with a third. It is an abstraction, a property attributed to several events, not reality, but an interpretation of it. Therefore a person is presented with three events, and he or she is asked to choose an aspect to which two of these events are a replication of each other, but contrasting to the third. It is upon this contrast that the very meaning of personal constructs depends.

### An Elaboration of the Meaning of Intercultural Adaptation

Intercultural adaptation, as defined here, is a process by which a person is able to make sense of a foreign environment and to break loose

from the confines of his or her own culture. In order to make suggestions about how this occurs, an attempt has been made to understand the individual as a cultural being, through the help of personal construct theory. First a conception of how a person's cognitive processes operate and develop was needed. Then the forces that tie people into cultural groups and the effects of culture upon the individual had to be understood. If interpersonal effectiveness is a highly valued outcome of a person's psychological development, then intercultural adaptation is even more than that. It is the ability to see how others view the world, to accept others and their way of seeing things, and to construe their construction processes.

For maximum benefit from the application of this theory, personal construct theory ought to be able to explain the information already available about intercultural behavior. Such an explanation should spell out the meaning of intercultural adaptation, thus offering a basis for interpreting a person's responses on a paper and pencil instrument. Personal construct theory subsumes much of the knowledge already available from the different approaches used in the study of this construct. This section aims to (a) provide a link between personal construct theory and conceptions of intercultural adaptation previously expressed by different researchers, and (b) offer an elaboration of the construct of intercultural adaptation, thus providing a basis for the interpretation of a person's responses on the paper and pencil instrument presented in the fourth chapter.



Rather than add another to the already large number of lists of attributes or traits of an interculturally sensitive or adapted individual, intercultural adaptation is viewed from three angles. These are factors or dimensions believed to be helpful as indicators of this construct in people. Each of these dimensions is pregnant with meaning and implication, and each is not unrelated to the other two. These three aspects of intercultural adaptation are intertwined and cannot be truly isolated from each other. Intercultural adaptation is described as a person's demonstration of permeability, a scientific attitude, and a lack of stereotypes. This three-dimensional view of intercultural adaptation is convenient, practical, and likely to provide a reliable picture without being an oversimplification of a complex phenomenon.

### Permeability

To achieve intercultural adaptation a person exposed to a foreign environment undergoes a process of change or learning. According to personal construct theory, learning occurs if a person's present construction system does not permit him or her to correctly anticipate events. A person exposed to a foreign environment is in such a situation because of unfamiliarity with the different ways of seeing and doing things. Personal construct theory stipulates the conditions under which this learning will not occur. The variation in a person's construction system is limited by the permeability within whose range of convenience the variants lie (Kelly, 1955). Permeability is the capacity to embrace new elements without a major shift in one's construction system.

The capacity to embrace new elements means the ability for a person's superordinate constructs to admit into their range of convenience new elements which are not yet construed within their framework (Kelly, 1955). Permeability means that a person's constructs are able to develop a variety of new subordinate variations which are less shaken by the impact of unexpected minor daily events. New experiences and new events can be discriminatively added to those events already embraced. Kelly (1955) had this to say:

A person who approaches his world with a repertory of impermeable constructs is likely to find his system unworkable through the wider expanses of events. He will therefore tend to constrict his experiences to the narrower ranges which he is prepared to understand. On the other hand, if he is prepared to perceive events in new ways, he may accumulate experience rapidly. It is this adaptability which provides a more direct measure of the growing validity of a man's construct system than does the amount of time he consumes in swatting at the events which buzz around his ears. (p. 172)

The permeability of a person's constructs will manifest itself as a tendency towards maturity. Sullivan (1953) said a mature person has a well developed need for intimacy and for collaboration with others. He or she is sensitive to the needs of others and to the interpersonal security or absence of anxiety in others. His or her life is always increasing in importance through widening interests, deepening interests or both. The greater the degree of maturity, the less will be the interference of anxiety with living.

Permeability also shows itself as what many researcher (Barna, 1976; Ruben & Kealey, 1979) have referred to as a high tolerance for ambiguity and lowered defenses. If people are willing and able to tolerate some day to day uncertainties, they may broaden their fields of

vision and thus extend the predictive range of their system. This way they will be able to predict more events in a foreign environment. In the study carried out Ruben and Kealey (1979), persons who exhibited a high tolerance for ambiguity were found to be more effective in a foreign environment.

Permeability shows itself also as psychological integration. The interculturally effective person exhibits integration (Pearce & Kang, in press), possessing a clearly differentiated perception of himself or herself and the world. The person is aware of his or her basic cognitive structure or personal constructs, capacities, and values, and these are consistent with other aspects of his or her personality. The person is capable of self expression, which reduces emotional pressure.

Needless to say the impermeability of a person's constructs will show itself in failure to adjust in cross cultural situations. This is because the person's construction system will not tolerate incompatibilities. Impermeability is a strong subjective factor reflected in emotional imbalance where the person sees everything in a foreign culture as hostile and to be rejected. In some cases everything associated with the person's home environment is considered good and blameless. The person may be overpowered by a paranoic panic and a wish to return home. A different reaction may be xenophilia or excessive appreciation of the foreign environment as being better than anything there is at home. To adjust to other environments, people must instead be contented in their own cultures, as well as have personal confidence. Those likely to fail to adjust are fearful and lack confidence in what they carry

within themselves. In adjusting, feelings of self esteem and self regard must be retained. Personal construct theory brings forth this idea in specifying the conditions under which new constructs will not be formed. Sapir (1949) had this to say about adjustment:

It includes, obviously those accommodations to the behavior requirements of the group without which the individual would find himself isolated and ineffective, but it includes, just as significantly the effort to retain and make felt in the opinions and attitudes of others that particular cosmos of ideas and values which has grown up more or less unconsciously in the experience of the individual. (p. 159)

In order for a person to escape from his or her cultural controls, he or she must not ignore them; ". . . he must construe his way out" (Kelly, 1955, p. 182). A person needs to have a formula for this: a construct system which will permit him or her to see new expectations as not necessarily invalidating the original constructs.

Impermeability of a person's constructs therefore can show itself as excessive anxiety or fear. According to Kelly, anxiety is experienced when a person recognizes that new events lie outside the range of convenience of his or her construct system. It becomes a source of concern particularly if an individual's initial period of culture shock is overextended beyond that which other people experience in comparable situations. Anxiety occurs in intercultural situations because people feel that they have lost their ability to understand others in terms of their past expectations. This happens if the degree of conflict between a person's habitual mode of thinking and what actually happens is too great, and the person's whole construction system is threatened with an entire reconstruction. Anxiety will be minimal if a person has a well

defined remaining structure that does not need to be changed, and if the person has permeable constructs which adequately embrace both the new and the old behavior.

The process of adaptation sets in once a person's fear and anxiety levels are reduced. Sullivan (1953) characterized anxiety as the chief disruptive force in interpersonal relations and the main factor in the development of serious difficulties in living. The relaxation of the tension of anxiety is the experience of interpersonal security. He said, ". . . the role of anxiety in interpersonal relations is so profoundly important that its differentiation from all other tensions is vital" (Sullivan, 1953, p. 44).

#### A Scientific Attitude (Cognitive Complexity)

As has been mentioned, within the framework of personal construct theory a person is given the status of a scientist, seeking to predict and control the trend of events. To do this successfully a person must assume a scientific attitude or posture, also referred to as cognitive complexity. But what does this scientific attitude entail?

According to Flugel (1951) this means that the person (a) has an objective, versus subjective, emotional attitude, (b) sees that there are good and valuable features in every person or society, even though they may differ from his or her own standards or ideals, and (c) is aware that all persons are liable to human weaknesses such as may be exhibited by those who harm, threaten, or annoy us or those who indulge in conduct that arouses indignation or disgust.



Shepherd (1971) said that this scientific attitude is characterized by a general perspective which is shown when a person (a) is interested in things common to all people or to groups of people, (b) seeks to abstract from his or her personal perspective those elements common and to discard idiosyncratic ones, and (c) maintains a posture of doubt or an attitude of inquiry. The person does not take anything for granted except the basic assumptions.

Kelly (1955) said that in order for people to play constructive roles in relation to others, they must have an acceptance of others and their ways of doing and seeing things. This principle is essential in intercultural interactions. This means that people are aware of the fact that construction systems, no matter whose they are, are mere representations of reality, not reality itself. It means that people are aware of the existence of different world views, patterns of thought, or philosophies in the various cultures (Porter & Samovar, 1976) and in various individuals. Accepting other people and their cultures does not mean liking or agreeing with all aspects of their cultures or personal perspectives, but rather it means accepting their perspectives in their own right. This is the concept of cultural relativism, referred to by many researchers. Ruben and Kealey (1979) found people who had been observed to be relativistic to be more effective in a cross cultural situation.

To be relativistic a person has to possess considerable tolerance of the ways and opinions prevailing in a foreign environment (Barna, 1976; Daniel, 1975; Flugel, 1951; Porter & Samovar, 1976). Relativistic



people realize that the rest of the world does not share the same role behaviors as themselves. They realize that for the other people their behaviors are completely natural, normal and moral even though they may seem not to be to somebody else. In defining tolerance Flugel (1951) said,

Tolerance, as a state or attitude of mind, stands midway between love, affection, esteem, and admiration on the one side, and aggression, anger, and hatred on the other side . . . a situation which implies the possibility of disagreement, disapproval, disappointment, misgiving, anxiety, or annoyance, but is actually an attitude in which these responses are held in check and prevented from manifesting themselves in such a way as would arouse violent emotional reactions in the individual or would seriously endanger harmony and cooperation in the group. (p. 196)

As this definition states, the person in a foreign environment experiences pain or hardship due to the action or opinions of others.

Tolerance means patiently enduring while withholding oneself from being unduly severe in judging the conduct of one's hosts. It means an ability or a tendency to be nonjudgmental.

Being judgmental refers to the tendency to evaluate, to approve or disapprove the statements or actions of other persons, on the basis of one's cultural values, rather than to try to understand the feelings and thoughts expressed. It refers to the lack of openmindedness and is based on the fact that it is risky to change one's own values and perceptions. According to personal construct theory, people feel threatened when they become aware that they soon have to change their core construction structures. This is because if they change, their ability to anticipate events using their new structures (or no structures if nothing replaces the old) is reduced. Threat occurs when the constructs

involved are superordinate. Barna (1976) said, "It is very easy to dismiss strange or different behaviors as 'wrong,' and listen through a thick screen of value judgements, and therefore fail miserably to receive a fair understanding" (p. 295). The importance of being non-judgmental in intercultural adaptation is emphasized by many writers like Kraemer (1975) and Ruben and Kealey (1979).

Tolerance also means the act of endurance without undue arousal of aggression or anxiety or a breakdown of psychobiological adjustment. The role of anxiety in relation to permeability has already been discussed. The relationship of anxiety to tolerance, and indirectly to the possession of a scientific attitude is a reminder of the interrelatedness of these dimensions. Aggression is the active elaboration of one's perceptual field, according to personal construct theory. It means always putting oneself on the line ". . . by precipitating situations which call for decisions and action" (McCoy, 1977, p. 117). The relationship between aggression and anxiety is noted in this statement of Kelly's:

When a person is aggressive, he seeks out bits of confusion. He fusses over them, he tests out constructs which might possibly fit and he rapidly abandons those which appear to be irrelevant. Indeed one might say that the areas of one's aggression are those in which there are anxieties he can face. (Kelly, 1955, p. 509)

A breakdown of psychobiological adjustment is experienced, as mentioned in relation to permeability. For example, a person may start to deal with a foreign environment in a nemesistic way, which means the turning of aggression away from the foreign environment and redirecting it against the self. This is an unrealistic and neurotic way of dealing

with occurrences which are beyond a person's construction system. Flugel (1951) said that the ability to tolerate correlates with mental health and involves the anticipation (explicit or implicit) of the future in light of which our present conduct is guided. It takes a well integrated personality to tolerate differences and criticism.

### A Lack of Stereotypes

According to Porter and Samovar (1976), stereotypes are attitudinal sets in which people assign attributes to others solely on the basis of the class or category to which others belong, and therefore behave accordingly towards them. Stereotypes thus interfere with communication experiences. Much time is spent looking for whatever reinforces personal prejudices while everything else is ignored.

According to personal construct theory, stereotypes are undifferentiated constructs which may never have been differentiated, or which have been linked through a person's experiences, through construction, so that they now function as a single construct. Stereotypes are a type of constellatory constructs, or those in which a person permits elements to belong to other realms, but fixes their realm membership. One example of a constellatory construct is thinking that anybody who is a teenage black male must also be a thief. In other words, a person with certain attributes is assumed to have other specified attributes too. Fransella (1977) said, "It is when we take a particular subsystem of constructions for granted and use it in a constellatory or preemptive way that we have stereotypes in operation" (p. 41). Preemptive constructs are ones which preempt their elements for membership in their

own realms exclusively. Other constructions are not accepted in preemptive thinking. For instance if a person is construed as schizophrenic, then he or she may be seen as nothing else but that. Kelly (1955) said, "The problem of preemption is a major factor in interpersonal relations and in certain thick-skulled approaches to social conflict" (p. 154).

Stereotypes are preconceptions meant to fill the gaps resulting from lack of experience or the imagination to understand another person's point of view. They are psychological defenses against helplessness and through them we assimilate the material to our own frame of reference or construction system. Barna (1976) defined stereotypes as,

. . . overgeneralized beliefs that provide conceptual bases from which to "make sense" out of what goes on around us. In a foreign land they increase our feeling of security and are psychologically necessary to the degree that we cannot tolerate ambiguity or the sense of helplessness resulting from an inability to understand and deal with people beyond our comprehension. (p. 294)

Stereotypes afford one with a sense of security and are often associated with superiority. They are rationalizations for prejudice and are reinforced by the tendency to perceive selectively only those pieces of information that correspond to a person's imaginings. The more frustrated and threatened a person is, the more emotionally inadequate and insecure, the easier it is to be stereotypic.

As already mentioned, threat, in the framework of personal construct theory, is experienced when a person becomes aware of an imminent change of his or her core construction structure. A possible reaction to threat is hostility. Hostility is an attempt to extort validation evidence for a type of social prediction which has already proved itself a failure. It is an attempt to protect the construct system from

invalidation. When a person pays attention to only those events that support his or her expectations, that person is displaying hostility. Stereotypes, by the way they are reinforced, can be viewed as hostile reactions.

Shepherd (1971) conceptualized stereotypes as a major kind of typification. Like all typifications, they are not developed to test hypotheses, but to maintain personal perspectives and anticipations; they serve to provide meaning consistent with expectation. They interfere with objectivity and because of their heavy emotional loading, they are very resistant to fact and logic.

Because of this they interfere with the process of change or learning in a new culture. Sullivan (1953) said stereotypes are handicaps in becoming acquainted with strangers, and that,

Stereotypes reflect inadequate and inappropriate elements in one's own self system; thus all the special stereotypes are either poor imitations of ingredients in the personified self or . . . they are not elements from the personification of the self. (p. 303)

When people impose a stereotype on others they are not only defining the poles of those constructs that govern their group members, but they are also influencing their core role constructs. Because of their stereotypes they know what they are supposed to be and how they are supposed to act. They constantly remind themselves about what they are not (Fransella, 1977). Much of social life is controlled by the comparisons people have come to see between themselves and others (Kelly, 1955). Kelly (1955) said, "As one construes other people, he formulates the construction system which governs his own behavior. The constructs



which have other people as their contexts bind oneself too" (p. 133).

According to Sullivan (1953),

A person cannot personify others with any particular refinement except in terms of his own personification of himself and in terms of more or less imaginary entities related by the "not" technique to his personification of himself. (p. 302)

Sullivan illustrated this concept in the following way: If you personify yourself as generous, you tend to assume others will be generous. But since they are not, then you describe them as "not generous." This does not give you any particularly good formulation of what they are. They are just different or opposite from you. Therefore an inappropriate personification of others is based on an inappropriate and inadequate personification of oneself, and so our stereotypes of others help to define us. Because of this, Sullivan (1953) later said that stereotypes are ". . . effective in denying one any opportunity for spontaneous favourable change in the corresponding limitation in one's personification of oneself" (p. 304).

The next chapter presents the technique applied in the development of the instrument which is the focus of this study; the Repertory Grid technique. This is in fact a practical embodiment of personal construct theory. The developed instrument, its underlying assumptions, and procedures followed in scoring it are presented.



## CHAPTER IV

### THE SURVEY OF INTERCULTURAL CONSTRUCTS

One of the purposes of this study is to provide a general measure of individual differences with regards to intercultural behavior. The theoretical framework which has been outlined, and upon which the present instrument development was based, stipulated that in order to understand present and future behavior, we need to understand how people think. Specific information about the content and structure of a person's construction system is needed. The assumption is that individual differences will be discovered in people's construction systems that correspond to different levels in their ability to adjust in cross cultural situations. If this should be so, then a valid measure of intercultural sensitivity will have been devised.

The task is to study people's construction systems. Adams-Webber (1979) stated,

. . . information about the content and structure of a person's construction system will provide a source of useful cues to anyone--friend, spouse, therapist, or even a stranger--who attempts to interpret or anticipate his or her behavior. (p. 102)

Adams-Webber (1979) cited studies which were carried out which demonstrate that access to a person's constructs can enhance the accuracy of other people's attempts to predict his or her behavior. Predictions made on the basis of constructs were more accurate than those made on the basis of descriptive statements formulated by a group of peers about a person.

### The Nature of Constructs

In order to assess constructs, some clarity is necessary about their nature. A construct is an interpretation of a situation. It is an abstraction or a property attributed to several events. Kelly (1955) said constructs are dichotomous abstractions. Each has a limited range of convenience. The elements lying within this range of convenience constitute its context. Constructs are the channels along which one's mental processes run--the controls one places in life and on one's outlook. People can control their destinies to the extent that they can develop construction systems with which they identify themselves and which are sufficiently comprehensive to subsume the world around them.

The world is real, and people's psychological processes are based on personal versions of that reality, that is, on personal constructs. Constructs are also real, though they are distinct from the factual material they represent. To a certain extent constructs can be communicated from one person to another without losing their reality. A communicated construct is one construed by the person who receives it, hence it is not identical with the original construct. It is impossible for individuals to express the whole of their construction systems. Thus sometimes it is difficult for one to be articulate about how one feels, or for one to predict correctly how they will behave in a future situation. It may be impossible to express certain constructs such that others can subsume them within their own systems. To be understood, a person's constructs have to be concretized, that is, pointed at events

or objects. The choice of which constructs to concretize is purely hypothetical and has to stand up to validation procedures.

The approach to measurement mapped out by personal construct theory is, first of all, idiographic. It is based on the idea that individuals have their own idiosyncratic systems of interpreting their social environments. This approach is also nomothetic in that it causes a researcher to look for general behavior themes abstracted across individuals which will tell about the behavior of human beings in general.

The objective is to find out how a person relates to those of other cultures around him or her, and to find out the constructs he or she applies to them. For as one construes other people, one formulates the construction system which governs one's own behavior. People's constructs are revealed when they talk about others. No attempt is made to predict specific behaviors in specific situations. According to Kelly, to predict is to construe movement or a trend among events. The point of convergence of all the selected constructs then constitutes the prediction. Personal construct theory has warned against explaining specific behaviors as derivatives of their immediately antecedent behaviors. This approach differs from others such as the behavioral approach employed by Ruben (1976), in that the aim is not to assess specific behaviors, but rather constructs which underly those behaviors. The pattern of thinking a person displays is the best indication of the pattern he or she is likely to display at some future time or situation.

This differs from saying that what one does now is the best indication of what one will do at some future time or place, as is suggested by Ruben (1976).

The interest here also is in finding out how a person's constructs are organized in relation to one another to form a system. Consistent with the view of personality expressed in the second chapter, it is not just the kind of constructs held by an individual that makes him or her, but it is the unique organization of those constructs.

Personal construct theory has stated that a person's construct system is composed of a finite number of dichotomous constructs. There is empirical evidence that the number of constructs which can be elicited from a person is limited (Hunt, cited in Kelly, 1955). Nevertheless it is sufficient to obtain only what is perceived as a representative sample of a person's constructs in the subsystem concerned with intercultural behavior.

The task therefore is to find out what each person's constructs are and how they are organized. Kelly's definition of a construct is as follows: a construct is a way in which at least two things are similar and contrast with a third (1955). Information about people's constructs will help to describe them in terms of the dimensions which spell out the meaning of intercultural sensitivity. This is done by applying the Repertory Grid technique developed by Kelly in relation to personal construct theory.

### The Repertory Grid Technique

Kelly designed the Role Construct Repertory Test to elicit a representative sample of constructs upon which a person relies to interpret and predict the behavior of people in his or her life, and to assess the way in which a person relates these constructs to one another (Adams-Webber, 1979). In this instrument respondents are first asked to nominate people from their own lives who fit a list of specified roles. They are provided with a role title list, e.g., father, sister, good teacher, bad teacher, etc. They are then presented with combinations of three of these people one at a time. With each they are asked to choose the two most similar people and to say in which way these two are most similar, and to specify the way in which the third person in the triad differs from the other two. These descriptions constitute each respondent's constructs presented in a similarity-contrast dimension. By inspecting and analyzing the list of constructs obtained this way, the nature of a person's construct system is deduced. The dominant constructs a person uses to interpret experiences are determined.

In the grid form of the test, the respondent is first presented with the standard triads of persons in the form of a grid which has persons on one dimension and constructs on the other. The format of Kelly's repertory grid is presented in Kelly (1955, p. 270). The respondent is asked to indicate which two persons in a given triad are similar by placing an X in the appropriate circles in the grid. These circles have been placed in each line only in the boxes corresponding to

the three persons the respondent is asked to compare. The respondent then writes in the provided spaces the construct, and its implied opposite, that he or she has used to compare the people. The second time around, the respondent is asked to apply the elicited constructs to all the remaining persons on each row. He or she is instructed to place a check mark in the boxes of those persons to whom each construct applies.

The resulting pattern of checks and X's may be converted to a series of numbered coordinates without reference to the verbal labels given to the constructs. What is of interest is the pattern of expressed similarity and contrast indicated by the check marks and the crosses. The resulting matrix represents a person's unique personality theory--the system of personal constructs by which he or she interprets events in life. Reading across the grid, questions can be answered about the persons construed as similar on a particular dimension. Reading down the columns questions can be answered about how the person construes each person on a whole series of dimensions or constructs.

### The Survey of Intercultural Constructs (SIC)

The final version of the instrument developed in this dissertation is called the Survey of Intercultural Constructs (SIC). Kelly's grid technique was applied in the development of the SIC because the grid permits an investigation beyond the words a respondent uses to name his or her constructs. It permits the study of contexts, that is, the study of the relationships between constructs done by analyzing the way in which they are applied to the same persons or classes of persons.



However, the application of Kelly's grid format was not done without modifications. In Kelly's original format when the respondents were asked to apply elicited constructs to all the persons evaluated, they were only asked to indicate whether or not a particular construct applied to each person. This way the respondent was asked to make only dichotomous distinctions between people. Some researchers (e.g., Slater, 1977) have criticized Kelly's original format for its limited scope in this respect, as well as his theory's dichotomy corollary, which forms its basis. This corollary states that a person's construct system consists of a finite number of dichotomous constructs. It is argued that in real life people make more differentiated distinctions than this corollary suggests.

Consequently the type of grid applied in the development of the SIC is a rating grid (Fransella & Bannister, 1977; Slater, 1977). The respondents are asked to rate all the people being evaluated on a five-point scale defined by the opposing poles of each construct. The resulting matrix of ratings is then analyzed using a Fortran program developed by Slater (1972). More is said about the scoring of this instrument at a later section in this chapter.

A copy of the final version of the SIC is shown in Appendix C. The rationale of the role titles and the triads of people used in this instrument is presented next.

### The Role Title List

The role title list given in the second question of this instrument includes people believed to have had some influence in a person's life

in influencing his or her present intercultural role. There are two categories of people in this list. Persons qualify for membership in these categories according to (a) whether the respondent looks up to them or not (B, C, D, and E), and (b) whether they are respected or not (F, G, H, and I). The choice of these categories was purely hypothetical, and they were selected such that both positively regarded and negatively regarded persons would be represented.

In each category there is an equal number of persons from the respondent's own culture as that of persons from foreign cultures. This balance was purposefully created in agreement with the third assumption underlying the instrument, presented in the next section. This assumption requires that the sample be representative with respect to the relevant dimensions. People's intercultural roles are the focus of this investigation, and this list was created so as to be representative of those with whom a person must relate his or her self construed intercultural role.

### The Triads

The 18 triads represent all possible combinations of the eight persons from the two categories in such a way that two are members of the respondent's own culture, while the third belongs to a different culture. In triads 1, 2, 13, and 14, the respondent is asked to compare three persons all of whom belong to a single category. This means that two of the three fall on the same pole (positive or negative) of each role description, and the third falls on the opposite pole. In this group of triads the respondent is most likely to produce constructs

which follow along the lines of similarity and contrast suggested by the poles of each role description. In other words they are most likely to say why they look up to certain people and why they respect certain people.

In the rest of the triads the respondent is faced with more formidable problems compelling him or her to compare persons across categories and across poles. Most likely to be obtained here are constructs which follow along the lines of similarity and contrast suggested by the role descriptions irrespective of the categories to which the persons belong. This should yield constructs that link the two categories to each other.

In all triads the respondent is confronted with three persons, two of whom belong to his or her own cultural group. Obviously it will be preferred if the respondent names constructs which do not always discriminate among people on the basis of cultural group membership. This triad combination was done with the fourth assumption of this instrument in mind, so as to be representative of those with whom a respondent must deal in structuring his or her intercultural role. The impressions people form about foreigners are formed through comparisons they make between their own group members and the foreigners. Thus the intercultural roles people shape for themselves can be discovered by presenting them with a hypothetical environment that fosters intercultural comparisons. This was an attempt to emulate real life situations as closely as possible.

### Assumptions Underlying the SIC

The assumptions upon which the SIC is based are an adaptation and a combination of both the assumptions that underly Kelly's Role Construct Repertory test, and those that underly the grid form of the test.

1. It is assumed that the constructs elicited are permeable, that is, they are open to the addition of new people, or people beyond those upon which the constructs were explicitly formed. It is believed that the role titles represent people whom the respondent personally understands, and that understanding, right or wrong, provides a context out of which the constructs governing his or her own role take shape. It is hoped that a respondent reveals those channels through which new experiences, as well as old, may run. It is assumed that the constructs elicited are ones which can be applied to people in cross cultural situations not yet experienced.

Past research has shown that constructs elicited using the Repertory Grid technique are permeable, since people have been observed to apply the same constructs when retested (Adams-Webber, 1979; Kelly, 1955). There is evidence that when this procedure is used to elicit constructs from the same people on different occasions many of the constructs are repeated even when new people are being evaluated. Adams-Webber (1979) cited a number of studies that show this. Therefore constructs elicited in this way are a representative sample of those dimensions a person uses to interpret his or her social environment.

2. It is assumed that preexisting constructs are elicited, rather than ones concocted on the spot. There is some assumed permanence in the constructs elicited. This assumption is also supported by empirical evidence since most of the elicited constructs show up with reliability on later occasions.

3. It is assumed that the people evaluated are representative of all the people with whom the respondent must relate the self construed intercultural role. The list of roles is designed with this in mind. Therefore representative people with respect to whom the respondent may have formed the most crucial intercultural role constructs are included in the list.

4. It is assumed that the triads presented are representative of those with which a respondent must deal in structuring his or her intercultural role. This means that the trio calls for the kind of discrimination which invokes one of the personal dimensions in terms of which a respondent's psychological space is structured.

5. It is assumed that constructs are elicited which subsume, in part, the construction systems of the people being evaluated. This is a respondent's understanding of the construct systems of other people whether they are from his or her own culture or from other cultures. It is assumed that a number of constructs elicited represent a respondent's understanding, right or wrong, of the way that these people look at things. This understanding is the basis of real social interactions with them. Earlier in this dissertation intercultural adaptation was defined in terms of sociality, as a person's ability to construe the

construction processes of another person from another culture. Therefore the elicited constructs subsume, in part, the construction systems of those of the respondents' acquaintances from cultures other than their own, in addition to those of acquaintances from their own cultures.

6. It is assumed that the constructs elicited from a respondent govern his or her behavior and role. If the respondent fails to organize his or her own behavior under the constructs elicited, then the constructs cannot be considered role constructs. The extent to which this assumption is met can be discovered in each person's response pattern in their tendency not to rate themselves in the middle of the scale on each construct.

7. It is assumed that respondents do not shift ground between writing one pole of their constructs and listing the opposite poles. When this happens a respondent gives the examiner what are essentially the emergent poles of two different construct dimensions.

8. It is assumed that the constructs elicited are functionally communicable. That is, the words a respondent uses in naming the constructs are adequate to give the examiner some practical understanding of how he or she is organizing the people being evaluated. This assumption may be more crucial for some uses to which the SIC may be put than for others. For instance if it is used for counseling, it is important that the word meaning of a respondent mean exactly what the counselor thinks they mean. If the interest is only in studying relationships



between constructs, analyzing the content of a respondent's language is unnecessary, and this assumption is not important.

9. A final assumption specific to the SIC is that the respondent is personally acquainted with at least four people who are not members of his or her own culture. The extent to which he or she understands them is part of what this instrument is attempting to measure.

### Scoring Procedure for the SIC

In the analysis of the completed SIC grids, modes of analyses that tend to examine construct relations and relationships between persons, one at a time, were avoided. Adams-Webber (1970) showed that there are high correlations between indices derived from relationships between the persons nominated by a respondent and those derived from relationships between constructs. There is considerable interaction between the rows and columns of a completed grid.

The completed SIC grids are analyzed by means of a Fortran program, INGRID, developed by Slater (1972). This program lists many derived properties of a grid commonly found to be of psychological interest such as those that have been used to define the concepts of identification, differentiation, and stereotypic tendencies (Adams-Webber, 1970). A principal component analysis forms the major part of this program. Psychological space is conceptualized as a hypersphere. The first three components are defined as three orthogonal diameters of this sphere. Constructs are represented by their polar coordinates or vectors emanating from the center of the sphere. The persons evaluated are plotted as

points in this three dimensional system. The lines joining each point to the center of the sphere are the person vectors. This method specifies relationships of constructs to one another, the relationships of persons to one another, and the relationships between the persons evaluated and the constructs used to evaluate them.

Unlike factor analytic procedures, such as Kelly's original method of analysis, this method does not assume the existence of hypothetical factors. Components are mathematical functions of observable variables. Hope (1966) has pointed out that in the comparison of grids, this method of analysis does not impose constraints on either the persons evaluated or the constructs used.

A problem with Slater's analysis that some researchers have alluded to is that because a respondent's matrix of responses is centered only for constructs rather than for both rows and columns, this distorts the relationship between the rows and the columns (Hope, 1966; Wilson, cited in Fransella & Bannister, 1977). Critics of this aspect of Slater's model have not provided explicit suggestions for improvement, however.

In the analysis of preliminary data in this study, normalization was not done at all. The assumption made was that the respondents apply the rating scale consistently. It is assumed that if a respondent reports wider variations on some constructs than on others, they are the ones he or she finds more effective for discriminating between people, and they do not necessarily reflect response sets, or constructs in which he or she finds it difficult to make fine distinctions between people. The output from the INGRID program includes the following:

1. Correlations and angular distances between constructs.
2. The means for each construct and the total variation about them expressed both as sums of squares and as percentages of the total variation in the grid.
3. Measures of bias and variability. Bias is the tendency for responses to accumulate at one end of a rating scale while variability is the tendency for responses to gravitate towards both ends. These measures may be used to compare two or more people on acquiescence and extremism.
4. Relationships of elements<sup>3</sup> to one another. These are given in the form of distances between elements. Distances over one are greater than expected and those under one are less than expected. The distances can be used to compare grids completed by different people even if they do not all refer to the same elements or constructs.
5. The sum of squares for each element is listed as a percentage of the total variation. The importance of each element is indicated by the size of its sum of squares. If this is small it means that the respondent is rather indifferent to that person, that is, he or she rated him or her in the middle of scale.
6. Non-zero latent roots are listed from the largest to the smallest as observed quantities and as percentages of the total variation. Usually not more than three of them account for a large proportion of

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<sup>3</sup>The term 'elements' refers to the people evaluated by the respondent. This term is used here since it is the one used in Slater's Grid Analysis Package.

the variance. Loadings of the constructs and elements on the first three components are provided. These indicate the psychological contents of the first three components.

7. Lists of polar coordinates for the constructs and elements calculated from their loadings on these three (or more) components are listed. These coordinates can be used for plotting points for constructs and elements on two or three dimensional diagrams of a sphere (as outlined in the eighth and ninth chapters in Slater, 1977).

8. Tables of the relationships between the constructs and the elements, and between each element and every other are provided. These relationships are given in cosines (mathematically equivalent to correlations) and angular distances. In some cases it is better to consider angular distances between constructs rather than their correlations. The average of a set of angles is itself an angle, whereas the average of a set of correlations is not a correlation. Angular distances can be used to compare grids.

In scoring the SIC the focus is placed on specific derived properties of the grid which are either listed by the INGRID program or can be calculated easily from its output. Three indices thought to be related to intercultural sensitivity are extracted from each person's data. The indices extracted are described next.

### Identification

In the fourth part of the completion of the SIC the respondent is asked to rate all persons on a scale of one to five on each elicited construct. One of these persons (located on the first column) is the

respondent. Identification is the extent to which the self and others are characterized as similar. Therefore the interest here is to study the relationships between the entries under the first column and each of the other eight columns. These relationships are provided in the output of INGRID in a table of distances between elements. The distance between any pair of persons is given as a ratio of the expected distances between all pairs of persons in the grid. This measure has a minimum of zero, a mean of one, and seldom exceeds two. Thus any pair of persons separated by a distance close to zero are seen as being similar, with a distance close to two as being dissimilar, and with a distance close to one, as being neither similar nor dissimilar, but indifferent to each other.

Low scoring people on this index perceive others as being similar to themselves in forming impressions. This means that there is a greater likelihood that such people's construction of new people in their lives will be similar to the way they perceive themselves in terms of the constructs used in completing the instrument.

In line with personal construct theory outlined earlier, it is hypothesized that the lower the average distance between the self and others, the less interculturally sensitive an individual is. This is because such people exhibit a subjective emotional attitude rather than a scientific one. They do not demonstrate an awareness of the existence of different world views in various people, and are thus not very likely to adjust successfully in cross cultural situations.

An identification score close to two also presents another problem since it means that the individual sees him or her self as unlike others. Ryle (1976) reported on experiments done comparing patients suffering from neurotic disorders with controls on some features of the grid. It was found that patients had more elements at a distance of one or over than did controls.

In the preliminary testing of the draft instrument three identification scores were calculated so that their separate validities could be studied in order to determine which one is the best indicator of intercultural sensitivity. The three identification scores calculated are as follows: (a) the average distance between the self and a respondent's own culture members, (b) the average distance between the self and foreign culture members, and (c) the average distance between the self and all others.

Identification is said to correlate highly with several grid-based measures on cognitive complexity (Adams-Webber, 1970). Past research has shown that the correlations between identification and several other indices is higher than the test-retest reliability of these measures of cognitive complexity (Adams-Webber, 1979). The evidence suggests that the identification score is probably the most reliable of any structural index which can be derived from the grid. Adams-Webber (1979) cited many studies which show this.

#### Differentiation (Cognitive Complexity)

This is the extent to which a person applies his or her constructs differently in categorizing people. High scoring individuals on this



index are people who tend to sort persons in an identical or near identical way on several constructs. Such people are considered cognitively simple, while those who sort others differently on every construct are said to be more differentiated. Differentiation therefore can be studied through a comparison of rows (constructs).

In the preliminary testing of the draft instrument, differentiation was assessed in three ways. First it was assessed by the size of the proportion of the total variation in the grid attributable to the first two components. The higher this proportion is, the more cognitively simple or unidimensional a person's constructs are. This measure, referred to as the explanatory power of the component, is given in the output of the INGRID program as the sum of the first two entries in the table listing the latent roots as percentages of the total variation. Grids may be compared in terms of it provided they are of the same size (Slater, 1977). The proportion of variation attributable to the first component alone, was included as the second measure of differentiation, for comparison.

Thirdly, differentiation was assessed by the magnitude of the total construct variance in the grid. The output of the INGRID program includes the amount of variation in a person's use of each construct as well as the total construct variance. A high mean construct variance indicates a strong tendency of the respondent to make global polar judgments rather than more differentiated discriminations (Pokela, 1980). Therefore people with high total construct variance are assumed to be less complex than those with smaller ones.

It is hypothesized here that the more cognitive simplicity (the higher the score) a person displays, the less intercultural sensitive he or she is. Experiments carried out by Adams-Webber in 1969 and 1972 (cited in Adams-Webber, 1979) are consistent in showing that there is a relationship between the degree of differentiation of a person's construct system and his or her skill in inferring the personal constructs of others from their behavior. It must be recalled that intercultural adaptation was defined as the ability of a person to construe the construction processes of another person from another culture. Therefore cognitive simplicity indicates the presence of poor skills in perceiving or understanding accurately the construction processes of others.

### Stereotypic Tendencies

The interest here is on finding out whether a respondent construes people in a stereotypic manner in relation to cultural group membership. The question is whether a respondent's constructs sort people according to whether they belong to his or her own cultural group or to a foreign culture.

Stereotypic tendencies are assessed by calculating the average distance between all possible pairs of members of the respondent's own culture, calculating the average distance between all possible pairs of foreign culture members, and then subtracting the latter from the former. The difference between these two averages indicates the magnitude of the average distance between these two groups. The larger it is, the more cultural group members tend to be clustered together.

If a respondent gets a high score on this index, it means that his or her constructs sort people according to whether they belong to their own cultural group or to other cultures. This is stereotypic thinking, and the presence of stereotypic tendencies in a person indicates low intercultural sensitivity.

A positive score means that the average distance between people of the respondent's own culture is greater than the average distance between people of other cultures. This means that the respondent perceives people of his or her own culture as less similar to one another, while seeing people of other cultures as more similar to one another. A negative score indicates that the reverse is true.

#### Analysis of the Content of Constructs

With some uses of the SIC, such as counseling, it may be necessary to examine the content of a respondent's constructs. Of course in such instances, a wide variety of information, apart from that supplied by the SIC is necessary in order to successfully guide an individual into sound decision making.

A considerable amount of data, other than that used to obtain the indices discussed in the previous section, is available from the output of the INGRID program and other programs in the Grid Analysis Package (GAP).<sup>4</sup> Slater (1977) provided the general procedure for the complete

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<sup>4</sup>The Grid Analysis Package contains the programs INGRID 72, DELTA, SERIES, PREFAN, ADELA, and NEW COIN. It is available to institutions at a cost of approximately \$500.00. This package can be ordered from Dr. Patrick Slater, at St. George's Hospital Medical School, Clare House, Blackshaw Road, London, S.W. 17.

analysis of an individual grid and its logical basis. In this section what are considered key elements to be studied in the content analysis of a SIC grid are given, on the basis of Slater's account. An example is provided of a SIC grid obtained from a twenty year old undergraduate female student at the University of Massachusetts at Amherst. This respondent's completed SIC grid is shown in Table 1.

#### The Table of Mean Ratings for Each Construct

This is the first table provided in the output of the INGRID program. This table should be studied with the following questions in mind:

1. Which construct means deviate from the midpoint of the rating scale (3) the most? The respondent has been able to discriminate between persons the most on the basis of these constructs. In the example provided (see Table 2) the respondent discriminated between people the most on the basis of constructs 2, 6, 16, 17, and 18.

2. Which constructs have the largest variations about their means? The persons evaluated differed the most in the extent to which they exhibit the characteristics indicated by these constructs. In the example given the persons differed the most in the extent to which they demonstrated self centeredness (construct #1), self confidence as women (construct #7), self confidence (construct #9), and an acceptance of people (construct #12).

3. Which constructs have the lowest variations about their means? These constructs are not very useful because they make such little

Table 1  
Completed SIC Grid Obtained from a Student at the University of Massachusetts

	A	B	C	D	E	F	G	H	I	Personal characteristic shared by any two of the three people circled	What makes the third person different?
1	1	1	1	4	1	1	3	5	5	Genuine interest in people's well-being	Self-centered
2	4	4	5	2	4	5	5	1	3	Immature	Mature
3	1	1	3	5	5	1	1	3	3	Artistic ability	Not artistically inclined
4	1	1	3	3	1	1	4	3	4	Child-like	More professional
5	1	1	1	2	1	1	2	5	5	Honest, personable, open	Alloof, negative attitude
6	5	5	5	4	5	5	5	1	1	Not trustworthy	Very sincere
7	4	5	5	1	1	5	5	1	1	Self-conscious as a woman	Self-confident as a woman
8	2	2	1	4	2	1	1	5	3	Mature	Immature
9	3	5	5	1	3	5	5	1	1	Concerned with self-image	Confident in self
10	4	5	5	4	4	5	4	1	1	Suspicious	Friendly, trusting
11	1	1	5	4	2	1	3	5	5	Liberal-minded	Opinionated
12	1	1	1	4	1	1	3	5	5	Accepts all people	More critical
13	1	1	1	2	2	1	1	5	5	Compassionate	Uncompassionate
14	4	4	5	2	3	5	3	1	1	Selfish	Very giving
15	1	1	1	2	2	1	3	5	5	Loving and positive	Insincere
16	1	1	1	1	1	1	1	5	5	Friendly and fun	Standoffish
17	1	1	1	1	1	1	1	5	5	Easy to get to know	Reserved
18	1	1	1	1	1	1	1	5	5	Caring	Uncaring

Table 2  
Mean Ratings for Each Construct and  
the Total Variation About Them

Construct	Mean	Variation	As Percent
1	2.44	26.22	6.48
2	4.00	8.00	1.98
3	2.56	22.22	5.49
4	2.33	14.00	3.46
5	2.11	22.89	5.66
6	4.00	24.00	5.93
7	3.11	32.89	8.13
8	2.33	16.00	3.96
9	3.22	27.56	6.81
10	3.67	20.00	4.95
11	3.00	26.00	6.43
12	2.44	26.22	6.48
13	2.11	22.89	5.66
14	3.11	18.89	4.67
15	2.33	22.00	5.44
16	1.89	24.89	6.15
17	1.89	24.89	6.15
18	1.89	24.89	6.15

distinctions between people. Construct 2 stands out as one such in the student's SIC grid.

#### The Matrix of Correlations Between Constructs

This table should be studied to see if there are any correlations which are abnormally high. Table 3 shows that this particular



Table 3

## Correlations Between Constructs

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. interest in people	.55	.32	.77	.92	-.88	-.66	.77	-.77	-.86	.73	1.00	.84	-.92	.90	.80	.80	.80
2. immature		-.60	-.19	-.37	.43	.74	-.71	.81	.40	-.28	-.55	-.44	.65	-.30	-.28	-.28	-.28
3. artistic																	
4. ability			.19	.20	-.26	-.80	.50	-.60	-.25	.50	.32	.37	-.47	.24	.15	.15	.15
5. child-like				.65	-.55	-.25	.27	-.34	-.54	.84	.77	.48	-.57	.68	.50	.50	.50
6. personable					-.98	-.62	.71	-.73	-.97	.70	.92	.96	-.87	.97	.97	.97	.97
7. not trustworthy						.68	-.77	.78	.96	-.68	-.88	-.98	.85	-.91	-.98	-.98	-.98
8. self conscious																	
9. as a woman																	
10. mature							-.80	.92	.72	-.48	-.66	-.77	.84	-.64	-.59	-.59	-.59
11. concerned with self image								.89	-.73	.49	.77	.77	-.82	.64	.67	.67	.67
12. suspicious									.80	-.52	-.78	-.81	.87	-.68	-.68	-.68	-.68
13. liberal-minded										-.61	-.86	-.97	.89	-.95	-.96	-.96	-.96
14. accepts people											.73	.66	-.59	.67	.63	.63	.63
15. compassionate												.84	-.92	.90	.80	.80	.80
16. selfish													-.87	.92	.97	.97	.97
17. loving and positive														-.90	-.78	-.78	-.78
18. friendly and fun															.91	.91	.91
19. easy to get to know																1.00	1.00
20. caring																	1.00

respondent associated being interested in other people's well being with accepting people rather than being critical of them. This respondent also saw constructs 16, 17, and 18 to be equivalent. Being reserved is associated with not caring, being standoffish, and being unfriendly. Such an association may be a cause of concern if this respondent found herself in a culture where it was considered respectable for women to be reserved, for instance.

The Table of Elements and the Sum  
of Squares Attributed to Each

This table should be examined to see which are the most salient elements (those with the largest sum of squares), and which are the least salient. The respondent is more or less neutral to the latter. Table 4 shows that elements H and I stand out as the most salient for this respondent. Both these are people this respondent has no respect for.

Table 4  
Elements and the Sum of Squares Attributed to Each

Element	Total	Sum of Squares	As Percent
A	11.44	21.84	5.40
B	7.44	29.40	7.27
C	-1.56	31.28	7.74
D	1.44	32.28	7.98
E	8.44	22.40	5.54
F	6.44	34.84	8.61
G	-2.56	20.51	5.07
H	-16.56	107.62	26.61
I	-14.56	104.28	25.78

### The Psychological Content of the First Three Components

The content of the first three components is analyzed by examining the table of the loadings of the elements and constructs on the first three components. The loadings of the elements and constructs indicate the psychological content of these components. Looking at each component separately one should look to see which elements and which constructs have the highest loadings on that component. Together these elements and constructs define the positive pole of this component. The elements and the constructs which have the lowest loadings define the opposite pole.

This should be done with every component. Since the principal components are orthogonal to one another, it is reasonable to suppose that the content of one component will be independent of another.

In the example given, Table 5 indicates that the first component is defined by the two people the respondent does not respect (H and I), and by being untrustworthy and being self conscious or lacking in self confidence (constructs 7 and 9). In other words people who are untrustworthy and people who lack self confidence tend not to receive this respondent's respect. The kinds of people who command this respondent's respect are people who are interested in others rather than self centered, personable rather than aloof, accepting of others rather than critical, compassionate rather than uncompassionate, friendly rather than standoffish, easy to get to know rather than reserved, caring rather than uncaring.

Table 5  
Loadings of the Elements and Constructs  
on the First Three Components

Element	Components		
	1	2	3
A	-3.99	-.06	1.98
B	-5.00	.99	1.37
C	-4.17	.76	-2.69
D	2.35	-4.56	-1.68
E	-1.80	-3.63	1.14
F	-5.51	1.55	1.20
G	-2.12	2.42	-2.41
H	10.20	1.15	.94
I	10.04	1.39	.15

Construct	Components		
	1	2	3
1. Interest in people	-4.78	-.19	1.10
2. immature	1.52	-1.82	.14
3. artistic ability	-1.96	3.82	1.06
4. child-like	-2.31	-.89	2.71
5. personable	-4.64	-1.17	-.05
6. not trustworthy	4.76	.82	.53
7. self conscious as woman	4.50	-3.31	.83
8. mature	-3.26	1.31	-.70
9. concerned with self image	4.49	-2.25	.77
10. suspicious	4.31	.63	.67
11. liberal-minded	-3.73	-.11	3.01
12. accepts people	-4.78	-.19	1.10
13. compassionate	-4.65	-.29	-.76
14. selfish	4.06	-.73	.02
15. loving and positive	-4.41	-.99	.20
16. friendly and fun	-4.62	-1.48	-.86
17. easy to get to know	-4.62	-1.48	-.86
18. caring	-4.62	-1.48	-.86

The second component is defined by the two people who are respected (F and G), and by having artistic ability (construct 3). People who are artistic tend to get this respondent's respect. On the other hand, immature people and those concerned with their self image (constructs 2 and 9) are people the respondent does not look up to (elements D and E).

It is interesting that in both the first and the second components this respondent made no distinctions between people on the basis of cultural group membership. This respondent tended to describe people in accordance with the dimensions provided in the role title list rather than in terms of cultural group membership. Other people might not be able to do this.

The positive pole of the third component is defined by the respondent herself and one person she looked up to from her own culture (A and B). These people go together with being liberal minded, child like, being interested in other people, and accepting of other people. In other words this respondent saw herself as being liberal minded rather than opinionated, being child like rather than professional, being interested in people rather than being self centered, and being accepting of other people rather than being critical of them. On the other hand people that she respected and looked up to are people who are friendly and fun rather than standoffish, people that are easy to get to know rather than reserved, and people who are caring rather than uncaring. It is noteworthy again that with this component this respondent measured herself against people of other cultures (C and G).

Analysis of SIC grids in such a fashion can assist a trained cross cultural counselor greatly in pinpointing possible problem areas in an individual's construct system that would otherwise go unnoticed if attention was paid only to the indices of intercultural sensitivity presented in the previous section.



## CHAPTER V

### INSTRUMENT DEVELOPMENT: METHODS AND FINDINGS REGARDING PRELIMINARY VERSIONS OF THE INSTRUMENT

#### Overview of the Methodology

The following steps were taken in the development of the SIC:  
(a) the search for a theoretical framework; (b) the development of the first version of the instrument--the Grid Test of Intercultural Sensitivity (GTIS); (c) preliminary testing of the draft instrument; (d) preliminary validation studies; (e) preliminary estimation of reliability; (f) the development of the second version of the instrument--the Index of Intercultural Sensitivity (IIS); and (g) the development of the final version of the instrument. Each of these steps is described in the following sections.

#### The Search for a Theoretical Framework

Because of the general nature of this instrument, there was no well defined body of content from which to prepare a blueprint. An existing theory--Kelly's personal construct theory--was applied in the definition and in the elaboration of the concepts of intercultural adaptation and intercultural sensitivity (see Chapter III). The selection of this theory was based upon an extensive review of empirical approaches, communication and psychological theories which have been used in the study of intercultural adaptation (see Chapter II).

### The First Version of the Instrument--the GTIS

The first version of the instrument called the Grid Test of Intercultural Sensitivity (GTIS) is shown in Appendix A. The first page of this instrument was intended to solicit the respondents' participation and to obtain their written permission to use the data they provided in preparing a research report. The instrument itself consisted of only the second and third pages. A fourth blank page was provided for the respondents to write whatever comments they had after completing the instrument.

The rationale of the role titles and the sorts used in this version is similar to that given in the fourth chapter for the final version of the instrument.

### Preliminary Testing of the Draft Instrument

The GTIS was administered to a total of 50 people. Eighteen of these were undergraduate students from various departments at the University of Massachusetts at Amherst. Eight were graduate students enrolled at the Center for International Education at the same institution. Ten were graduate students who were in the process of completing their masters degrees in the Program for Intercultural Management at the School for International Training in Brattleboro, Vermont. Seven were Peace Corps volunteers who were undergoing training in Washington, D.C. in readiness for work placements in Niger (West Africa) to serve as health specialists. Seven were members of the Amherst Area New Testament Church in Amherst.

All respondents were provided with as much time as they needed to complete the specified tasks in the instrument. In one group testing session the minimum time taken to complete the GTIS was observed to be about 45 minutes, and the maximum time was about 70 minutes.

Since a number of respondents had expressed difficulty understanding the instructions, a verbal explanation of the tasks in the instrument was given to each respondent, or to groups, whenever the instrument was administered to groups. On the two occasions when the instrument was administered to groups (this was done with the Washington D.C. and the Vermont groups) the researcher remained available in the room throughout the session to answer whatever questions the respondents raised. In cases where respondents worked on the instrument individually, they had access to the researcher by telephone in case they experienced difficulty while completing the instrument. This was done as an attempt to minimize the invalidity of the scores due to the lack of clarity of the instructions. Respondents were encouraged to write whatever comments they had on the instrument in the blank page provided. The comments they gave were noted, and later used, in the revision of the instrument and the development of the second version.

Many of the respondents complained that the instrument was too long. A few found the instructions confusing and difficult to follow even with the verbal instructions given. A suggestion was given against the use of technical language such as "Emergent Pole" and "Implicit Pole." One respondent suggested the change of the word "Test" in the title of the instrument, since it was misleading. Many expressed

difficulty in thinking up names of negative role figures from their lives, particularly people who were disliked. Also because the word "culture" was not defined, some expressed difficulty in deciding how to classify people in terms of culture. Many commented that the task of evaluating people was a difficult one. Other words used to describe the instrument included adjectives like interesting, thought provoking and fun, tedious, challenging, difficult, and absorbing.

The completed instruments were scored using the scoring procedure described in Chapter IV. Seven scores were obtained for each respondent, namely, three identification scores, three differentiation scores, and one stereotype score. Two more indices--the measure of bias and variability were recorded for each respondent and used in the preliminary analyses. This was done, not because any hypotheses had been formulated regarding the relationships of acquiescence and extremism with intercultural sensitivity, but in order to explore whatever relationships may exist. The results of past studies correlating acquiescence and extremism with personality traits, such as anxiety, impulsiveness, and dependency, that might influence a person's intercultural behavior, are not conclusive (Chetwynd, 1977). Thus the meaning of these two measures is not clearly understood, and the aim in their inclusion here was to explore their relationships with measures of intercultural sensitivity.

### Preliminary Validation Studies

The content validity of this instrument concerns the validity of the stimulus material with which the respondent is presented. It concerns first the extent to which the role title list evokes a representative list of key persons with respect to whom the respondent has formed the most crucial intercultural role constructs. Then it concerns the representativeness of the combinations of people with whom a respondent must deal in structuring his or her intercultural role. The choice of the specific categories of people in the role title list was hypothetical, and its appropriateness cannot be determined empirically, other than indirectly within the context of trait validity.<sup>5</sup> However the question of its validity, as well as the validity of the triads provided, has been dealt with by incorporation into the assumptions underlying this instrument.

The predictive validity, that is the extent to which performance on this instrument correlates with successful intercultural adaptation in a cross cultural environment, is of utmost importance. However in view of the difficulty involved in obtaining respondents' performance in cross cultural environments, and in the interest of keeping the scope of this dissertation within manageable limits, no attempts were made to investigate this kind of validity at this stage in the development of the instrument. The estimation of validity was therefore limited to the investigation of trait validity.

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<sup>5</sup>The term "trait" validity is used in these studies rather than "construct" validity due to the technical meaning of the word "construct" in the terminology of personal construct theory.

The aim was to examine preliminary evidence that the GTIS measures intercultural sensitivity as it was defined in the first chapter of this dissertation. Cronbach (1971) said trait validation studies should begin with a definite statement of the proposed use of the scores. A clearly stated use provides direction of the kind of evidence that is worth collecting. The intended uses of this instrument were stated in the first chapter, and the studies reported in this section were carried out with these uses in mind. The list of trait validation studies that can be done for an instrument such as this one is endless. The studies carried out here are by no means a representative sample of such a list.

Two causal comparative studies were carried out. These involve the linking of GTIS scores to variables presumed to be related to intercultural sensitivity. The convergence of GTIS scores with these variables would be considered evidence of the trait validity of this instrument. The third study is a correlational one, and it attempted to examine the relationships of GTIS scores to one another. Correlations were calculated also between GTIS scores and some variables presumed to be unrelated to intercultural sensitivity. The divergence of GTIS scores from these variables would also be considered evidence of trait validity. These studies were done utilizing the data collected from the tryout sample of 50 respondents mentioned earlier in this chapter. These studies address themselves to the following research questions:

1. Do respondents with overseas experience differ significantly from those without such experience in their GTIS scores?



2. Do respondents with overseas experience as well as cross cultural training differ significantly in their GTIS scores from those with neither of these experiences?

3. What is the relationship of GTIS scores to one another? What is the relationship of GTIS scores to measures of bias and variability? Are all GTIS scores equally valid measures of intercultural sensitivity?

The studies which were carried out in the attempt to answer the above questions are reported next. However a cautionary note is appropriate at this point. First the findings of the studies reported here say very little of the validity of the final version of this instrument. This is because they employ data collected using a preliminary version. The obtained scores probably contain error due to sources of invalidity, such as the lack of clarity of the instructions pointed out earlier, fatigue in the respondents due to the excessive length of the instrument, and the lack of motivation of some of the respondents.

Secondly, the internal validity of the studies reported was limited by the inability of the researcher to control adequately for extraneous variables in some of them. These studies therefore provide no proof of validity (or invalidity) of even this preliminary version of the instrument. They only provide tentative evidence in relation to the research questions raised. Their value lies in the fact that they helped to generate suggestions as to avenues in which the necessary research of the final version of the instrument should be directed.

### The Effect of Overseas Experience on GTIS Scores

Q.1 Do respondents who have overseas experience differ significantly from those without such experience in their GTIS scores?

Hypothesis. The null hypothesis is that there are no differences in the means of people who have overseas experience and those of people without overseas experience.

Method. The sample of 50 respondents to whom the GTIS had been administered was divided into two groups according to whether they had overseas experience or not. The first group consisted of 25 respondents. This was made up of the ten respondents from the School for International Training in Brattleboro, Vermont, the eight graduate students from the Center for International Education at the University of Massachusetts at Amherst, and seven undergraduate students from the same institution. People were assigned to this group only if, at some point in their lives, they had spent a minimum of nine months overseas. As a group, these people had an average of about two years overseas experience.

The second group also consisted of 25 respondents. Eleven of these were undergraduate students at the University of Massachusetts at Amherst, seven were members of the Amherst Area New Testament Church, and seven were Peace Corp volunteers who were to receive training in readiness for positions in West Africa. As a group they had an average of about two months overseas experience.

The causal comparative method was employed in this study. The objective was to find out if overseas experience is a possible cause of increased intercultural sensitivity, as measured by the GTIS. This involved identifying respondents who had overseas experience and then comparing them to a control group selected so as to be similar to

to the first group in all other respects except for the variable being studied.

Statistical analyses. T-tests of differences between the means of the two groups on each GTIS score were conducted.

Results. The results obtained are shown in Table 6. No significant differences were found in the means of the two groups on all the GTIS scores. Therefore the null hypothesis could not be rejected with any of the scores on the basis of this data.

Table 6

t-Tests Between Respondents with Overseas Experience  
and Respondents with No Overseas Experience

GTIS Score	Group 1 Mean <sup>a</sup> (N=25)	Group 2 Mean <sup>b</sup> (N=25)	t	p
ID 1 <sup>c</sup>	0.81	0.84	-1.24	0.22
ID 2 <sup>c</sup>	0.84	0.82	0.84	0.40
ID 3 <sup>c</sup>	0.82	0.83	-0.26	0.80
Diff.1 <sup>d</sup>	80.80	77.61	1.18	0.24
Diff.2 <sup>d</sup>	67.84	66.20	0.38	0.71
Diff.3 <sup>d</sup>	623.06	615.47	0.18	0.86
Ster. <sup>d</sup>	0.03	0.09	-1.06	0.30
Bias	0.19	0.19	-0.06	0.95
Variab.	0.53	0.55	-0.24	0.81

<sup>a</sup>Group 1 consisted of respondents with overseas experience.

<sup>b</sup>Group 2 consisted of respondents with no overseas experience.

<sup>c</sup>On these measures, low scores indicate low intercultural sensitivity.

<sup>d</sup>On these measures, low scores indicate high intercultural sensitivity.

Discussion. This study was carried out with the assumption that changes occur in a person's construction system when that person is involved in cross cultural situations. According to personal construct theory, this is because a person in such a situation does not have full knowledge of what events to anticipate. Therefore their present construction system undergoes a gradual reconstruction because it does not permit him or her to correctly anticipate events.

The obtained results would seem to suggest that overseas experience does not make a difference in people's intercultural sensitivity. However there are considerations which, if taken into account, limit the generalizability of these findings greatly.

One difficulty encountered in deciphering the meaning of these findings arises from the possibility that a person's intercultural sensitivity is a variable that changes with time. Past research has shown that people's attitudes towards their host cultures change with time. The changes that occur are in the form of a W-curve (Gullahorn & Gullahorn, 1963; Brein & David, 1971). Upon arrival in a foreign culture, there is the initial excitement over the new and possibly exciting environment. This is followed by a period of culture shock, marked by feelings of anxiety and depression as the person encounters difficulties. Then gradually there comes a period of satisfaction and personal growth when the person can work effectively with people of their host culture. Upon return home, the individuals experience a reverse culture shock. At this time the person is unable to reconcile his or her newly acquired and highly valued experiences with the perceptions and

attitudes of family and friends, who are unable to understand them. Thiagarajan (1971) said this phase is resolved by the acceptance of the reality of cultural differences and the attainment of a third culture perspective able to cope with both cultures. Gullahorn and Gullahorn (1963) suggested that the final resolution usually involves a relative dominance of one pattern of attitudes from one of the cultures over the other.

Given the likelihood that a person's intercultural sensitivity changes with time, the inherent weakness of the research design used here becomes clear. Its major limitation came from the fact that the investigation started with observed patterns of behavior (GTIS scores) and worked backwards attempting to discover their possible causes. Very little was known about each of the two groups compared.

For instance, it was not known how the first group would have performed on the GTIS before their overseas experiences. Perhaps they never had what it takes for people to adjust successfully in foreign cultures. It was not known how they would have performed immediately upon their return to the United States. The extent of the culture shock they experienced was not known, and it was not known if they were able to resolve that stage and begin to adjust, within a nine month period. Gullahorn and Gullahorn (1963) said that Americans require varying periods of time to adjust to different cultural areas. Therefore it is quite possible that the nine month period is unrealistically short.

It was not known to what extent this group actually had cross cultural experiences overseas. Were most of their relationships with host

country nationals or were they with other Americans? It is quite possible that the control group, even though they had no overseas experience, had in their past, had comparable cross cultural experiences within the United States.

None of these questions can be answered on the basis of the data available in this study. Consequently no conclusions can be made about the effect of overseas experience on GTIS scores. Carefully controlled studies are necessary in order to adequately investigate this question.

Suggestions for future research. A longitudinal study is suggested to investigate the effect of overseas experience on this instrument. A time series design would be appropriate even if it was not feasible to have a control group. This involves the administration of the instrument at periodic intervals (e.g., six months) beginning before a person's departure for an overseas post, continuing during their stay overseas, and upon return to their home country. The emergence of a W-curve pattern in the scores would be evidence of trait validity of this instrument.

### The Joint Effect of Overseas Experience and Cross Cultural Training on GTIS Scores

Q.2 Do respondents with overseas experience as well as cross cultural training differ significantly from those with neither of these experiences in their GTIS scores?

Hypothesis. The null hypothesis is that there are no differences in the means of people who have overseas experience plus cross cultural training and those of people with neither of these experiences.



Method. The first group consisted of 18 respondents. Ten of these were graduate students who were in the process of completing their masters degrees in the Program for Intercultural Management at the School for International Training in Brattleboro, Vermont. The other eight were graduate students at the Center for International Education at the University of Massachusetts at Amherst. These 18 respondents had spent an average of 33 months living and working in an overseas country. All had received cross cultural training in the past, and a few had even been involved in training other people.

The second group consisted of 25 respondents. Eleven of these were undergraduate students at the University of Massachusetts at Amherst. Seven were members of the Amherst Area New Testament Church, and the last seven were the Peace Corps volunteers who were getting ready to receive training in preparation for their departure to serve as health specialists in Niger (West Africa). As a group these 25 respondents had an average of about three months overseas experience. None of them had ever had any cross cultural training.

The causal comparative method was employed in this study also. The objective was to find out if overseas experience working jointly with cross cultural training is a possible cause of higher intercultural sensitivity. This involved identifying respondents with both overseas experience and cross cultural training, and comparing them to a control group.

Statistical analyses. T-tests of differences between the means of the two groups on each GTIS score were conducted.

Results. No significant differences were found in any of the GTIS scores except one--the stereotype score (see Table 7). The observed differences between the means of these two groups were significant at the .01 level. Therefore the null hypothesis could not be rejected with any of the GTIS scores except the stereotype score.

Table 7  
t-Tests Between Respondents with Overseas Experience  
Plus Cross Cultural Training and Respondents  
with Neither of These Experiences

GTIS Score	Group 1 Mean <sup>a</sup> (N=18)	Group 2 Mean <sup>b</sup> (N=25)	t	p
ID 1 <sup>c</sup>	0.80	0.84	-1.63	0.11
ID 2 <sup>c</sup>	0.83	0.82	0.47	0.64
ID 3 <sup>c</sup>	0.81	0.83	-0.84	0.41
Diff.1 <sup>d</sup>	82.55	77.61	1.68	0.10
Diff.2 <sup>d</sup>	71.08	66.19	1.07	0.29
Diff.3 <sup>d</sup>	648.55	615.47	0.72	0.47
Ster. <sup>d</sup>	-0.004	0.09	-2.53	0.01
Bias	0.26	0.19	2.03	0.05
Variab.	0.73	0.55	2.69	0.01

<sup>a</sup>Group 1 consisted of respondents with overseas experience and cross cultural training.

<sup>b</sup>Group 2 consisted of respondents with neither overseas experience nor cross cultural training.

<sup>c</sup>On these measures, low scores indicate low intercultural sensitivity.

<sup>d</sup>On these measures, low scores indicate high intercultural sensitivity.

Discussion. The results of this study would seem to suggest that overseas experience and cross cultural training, operating jointly, are a possible cause of increased intercultural sensitivity, as measured by one GTIS score--the stereotype score. This suggests the possible validity of this score.

The results of the previous study suggested no relationship exists between overseas experience and any of the GTIS scores, at least with regards to this particular sample of respondents. It might seem reasonable therefore to assume that cross cultural training was the probable cause of the observed heightened intercultural sensitivity in the first group. It would seem that cross cultural training makes a difference in the extent to which people employ stereotypes when thinking about people from other cultures.

One probable weakness of this study is that the samples used could not be matched with regards to age and level of education completed. The average age of the first group was about 31, whereas the average age of the second group was about 23. Most people in the first group had completed their masters degrees, whereas most people in the second group had either completed their undergraduate degrees or were in the process of completing them.

The seriousness of the failure to control for these variables however is questionable, if the naturally occurring interrelationships between these variables are taken into account. This study investigated the joint effect of overseas experience and cross cultural training. In practice these variables are closely linked to each other and to level

of education and to age. People who receive cross cultural training before going overseas are usually people who have been offered jobs on contracts, usually lasting at least two years on most technical assistance projects. They are selected for these positions on the basis of educational qualifications, among other things. Cross cultural training is related to a person's level of education since it is a form of education. In this study, for some of the respondents, cross cultural training was the major aspect of their graduate education. Older people are more likely candidates for overseas jobs than younger people because they are the ones who have attained higher levels of education. On the other hand people who go overseas on personal visits usually do not receive cross cultural training, and they tend to stay for shorter periods of time. Because of these interrelationships between variables, it may therefore be artificial to investigate the effects of cross cultural training on GTIS scores outside the context of these other variables. Cross cultural training seems to be an integral part of these variables.

Another limitation of this study came from the research design employed. As mentioned previously, the problem with the causal comparative design comes from the fact that the investigation starts with a person's observed performance, and works backwards to try to discover its causes. In this case a relationship was observed between the stereotype score and cross cultural training. However there was no knowledge of whether these observed patterns already existed in these people even before they were ever exposed to cross cultural training. The unresolved questions are: Did cross cultural training cause less

stereotypic thinking in these people? Did these people receive cross cultural training because they had volunteered for overseas positions (most were former Peace Corps volunteers), and were less stereotypic to start with? Or does some third factor influence both the stereotype score and the accessibility of cross cultural training? These questions could not be resolved on the basis of the data available in this study.

Suggestions for future research. Carefully controlled quasi-experimental studies are suggested for the study of the effects of cross cultural training on performance on this instrument.

### The Convergence and Divergence of GTIS Scores

Q.3 What are the relationships of the GTIS scores to one another? What are the relationships of GTIS scores to measures of bias and variability? Are all GTIS scores equally valid measures of intercultural sensitivity?

The argument here is that if all seven GTIS scores are valid measures of intercultural sensitivity, as was hypothesized, then there ought to be convergence among them. The fact that only the stereotype score was affected by cross cultural training and overseas experience, operating jointly, in the second study led to the questioning of the assumption that they all measure the same thing. This is the reason for their investigation here. In addition, it was expected that if these GTIS scores are valid measures of intercultural sensitivity, they would show divergence from measures that are irrelevant to this construct, such as bias and variability.

### Hypotheses.

1. The relationships of GTIS scores to one another are insignificant.
2. There are significant relationships between GTIS scores and measures of bias and variability.
3. All seven GTIS scores are equally valid measures of intercultural sensitivity.

Method. This investigation utilized the data obtained from all 50 respondents to whom the GTIS was administered.

Statistical analyses. Zero order correlations were calculated between the seven GTIS scores as well as the two measures of bias and variability.

Results. The obtained results are shown in Table 8.

Table 8  
Correlations of GTIS Scores to One Another  
and to Measures of Bias and Variability

	ID 2	ID 3	Diff.1	Diff.2	Diff.3	Ster.	Bias	Variab
ID 1	.05	.71**	-.25	-.23	-.10	.23	-.03	-.02
ID 2		.74**	-.35	-.41	-.01	-.30*	.12	.06
ID 3			-.43**	-.45**	-.08	-.05	.05	.01
Diff.1				.95**	.45**	-.11	-.06	.23
Diff.2					.42**	-.14	-.11	.21
Diff.3						-.14	.13	.44**
Ster.							-.13	-.13
Bias								.81**

Note. N=50.

\*Significant at the .05 level.

\*\*Significant at the .01 level.



Discussion. According to these results, the first and second identification scores measure two unrelated properties. However, as expected, each one of them was related to the third identification score. The correlation between ID 1 and ID 3 is 0.71, and that between ID 2 and ID 3 is 0.74. It must be recalled that the third identification score is the average distance between the respondent and all others. The first and second identification scores are the average distances between the respondent and people of his or her own culture, and between the respondent and people of other cultures, respectively.

The convergence of the second identification score and the stereotype score is worth notice. ID 2 was negatively correlated to the stereotype score. This correlation ( $r=-0.30$ ;  $p=.05$ ), even though negative, does denote a convergence between these two scores. This is because low scores on the second identification score indicate low intercultural sensitivity, and low scores on the stereotype score indicate high intercultural sensitivity. There is an inverse relationship between these two scores.

The correlations between the third identification score (ID 3) and the first and second differentiation scores (Diff.1 and Diff.2) are 0.43 and 0.45, respectively. These are consistent with past research findings cited earlier (Adams-Webber, 1970) that report that identification correlates highly with several measures of cognitive complexity. The correlation between the first and second differentiation scores (Diff.1

and Diff.2) is 0.95, suggesting that either one of these scores could be used by itself without much loss of information.

The third differentiation score has moderate correlations with both the first and second. However the third differentiation score stands out as different in that while the other two (Diff.1 and Diff.2) have moderate correlations with the third identification score (ID 3), Diff.3 has an insignificant correlation with ID 3.

As might be expected, the third differentiation score has a moderate correlation with the variability index. This score (Diff.3) measures the tendency of the respondent to make more global polar judgments, and the variability index measures the tendency for a person's responses to gravitate towards both ends of the rating scale.

These findings imply that there is an overlap between some of these scores. Figure 2 illustrates the relationships between the seven GTIS scores. Only significant correlations have been mapped in this diagram.

These results are not conclusive however, because of the size of the sample used. It is reasonable to expect that if the sample size was increased the correlations between ID 2 and the first and second differentiation scores (presently only -0.35 and -0.41, and insignificant) might reach statistical significance. This would then link ID 2 and either measure of differentiation (Diff.1 or Diff.2).

Only one of the seven GTIS scores reflects a relationship with variability--the third differentiation score (Diff.3)--suggesting that it is probably not a very good measure of intercultural sensitivity because it is contaminated by a measure of a response set reflecting

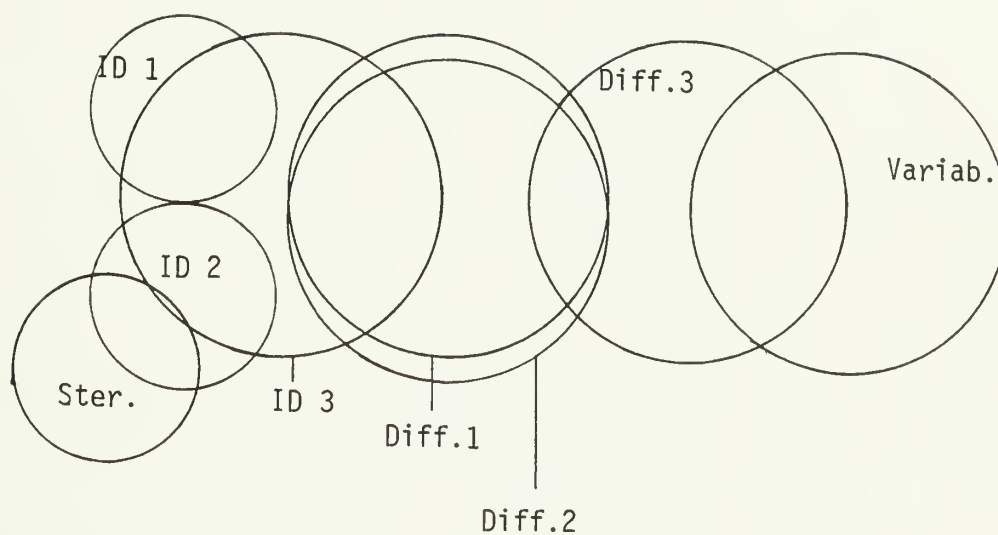


Figure 2. An illustration of the relationships of GTIS scores to one another.

Note. Only significant relationships have been mapped.

extremism. The lack of significant correlations of the other GTIS scores with both bias and variability is a promising sign that what these scores measure is unrelated to people's response sets. Campbell and Fiske (1959) pointed out that it is not sufficient to just show positive correlations among indicators of a construct. It is necessary also to show evidence that the construct being measured can be distinguished from others.

The fact that most of the relationships between GTIS scores obtained were less than unity indicates the possibility that the various GTIS scores may not be equally valid measures of intercultural sensitivity. The correlations obtained here do not provide a basis for determining which of the GTIS scores have superior validity as measures of intercultural sensitivity. However the second study indicated the possible validity of one score out of the seven investigated--the stereotype score. This observation warrants further study.

Summary of findings. The first hypothesis is rejected. There are some positive correlations between some of the GTIS scores. The nature of these relationships is illustrated in Figure 2.

The second hypothesis is rejected with all GTIS scores except with the third differentiation score. There were no significant correlations between GTIS scores and measures of bias and variability. The only score that showed a significant correlation with the measure of variability is the third differentiation score.

The third hypothesis was also rejected. The fact that most of the correlations between GTIS scores were observed to be well below unity

indicates the possibility that the various GTIS scores may not be equally valid measures of intercultural sensitivity.

### Summary of Preliminary Validation Studies

The preliminary validation studies carried out pointed to the need for carefully controlled quasi-experimental studies to study the effects of cross cultural training on scores on this instrument.

Since it is likely that intercultural adaptation is a multi-stage process, longitudinal studies are recommended to study the effects of various experiences or stages of adaptation on scores on this instrument.

Correlational studies are necessary in order to study relationships between variables presumed to be related to intercultural sensitivity, and scores on this instrument. However there are questions as to whether it is realistic to attempt to study the effects of these variables in isolation from one another since they are highly interrelated in real life.

The investigation of all seven scores on the final version of this instrument is suggested, in order that their relationships to one another and to measures of bias and variability might be understood. The differential validity of these scores also needs to be studied.

### Preliminary Estimation of Reliability

The reliability of any grid cannot be assessed by usual psychometric methods because of the idiographic nature of the technique. With grids, reliability or consistency refers to a characteristic of people

rather than a characteristic of instruments. As a function of the psychological processes of people, it needs to be studied. For this reason, it is best understood as one aspect of validity. If the instrument showed consistency, or lack of it, the question would be, under what conditions does this occur? This preliminary estimation of reliability was carried out, not as an attempt to answer this question, but rather to explicate this concept and to give an illustration of the kind of data to be gathered in its study. An account of the procedure followed is given next.

### Procedure

The GTIS was administered twice to ten undergraduate students at the University of Massachusetts at Amherst who were part of the tryout sample of 50 mentioned earlier. During the second administration, which was about a month later, these ten respondents were asked to evaluate the same group of people as they had evaluated before. They were provided with a copy of a list of these people and were instructed to complete the instrument as if they were doing it for the first time, without concern of whether they repeated constructs or not. After they had completed it, they were given the grids they had completed at the first administration, and were asked to compare their pretest and posttest constructs, and to indicate the constructs they had repeated by completing the form shown on Appendix D. To determine the sameness of constructs, Hunt's method (cited in Adams-Webber, 1979) was used. The respondents were instructed to judge constructs to be the same only if (a) they could apply both constructs to the same persons in identical



ways, and (b) they could answer "yes" to the questions, is a person who is ..... (pretest construct) ..... always ..... (posttest construct) .....? and is the reverse statement true?

The obtained data was statistically analyzed and three consistency measures derived from the instrument were estimated for each respondent. A discussion of these three measures and the findings obtained on them are presented next.

### Permeability

This is the tendency for respondents to repeat the same constructs when assessed on different occasions. The proportion of repeated constructs ranged from 52% to 80% and averaged about 71% in this group, as shown in Table 9. This is evidence that the respondents in this sample

Table 9  
Consistency Scores Obtained from Ten Respondents

Respondent	Permeability (percentage)	Element Consistency (correlation)	Relationship Consistency (correlation)
1	80	.75	.87
2	80	.65	.50
3	72	.54	.50
4	76	-.24	.03
5	80	.18	-.01
6	64	.32	.20
7	52	.00	.09
8	76	.84	.96
9	76	.89	.97
10	52	.69	.58

tended to reapply the same constructs upon reassessment. These findings are consistent with earlier findings by Hunt (cited in Kelly, 1955) and Fjeld and Landfield (1961) which showed that people repeat a substantial proportion of their constructs when reassessed. The findings of this study showed that this instrument probably samples from a limited quantity of a respondent's constructs. They also indicate the probability that mostly preexisting constructs had been elicited since it is highly unlikely that constructs which were newly formed during the first administration of the instrument would reappear with consistency on the second occasion.

#### Element Consistency

This is consistency over time in the way that respondents apply the same constructs to the same people. This measure investigated the extent to which the respondents rated persons the same way on the basis of the constructs they identified as having repeated.

The DELTA program developed by Slater (1972) was used to compare each respondent's pair of grids, using only the rows from both grids representing constructs that had been repeated. Slater (1972, 1977) gave a detailed account of the DELTA program. The program is applicable when two grids refer to the same persons as well as the same constructs. It calculates the mean ratings for each construct in each grid and the total variation about these means on each occasion. Among other results, the output of this program yields correlations between aligned constructs in the two grids. Their variation and covariation is accumulated to give a general degree of correlation between the two grids.

This correlation describes the element consistency. The correlations obtained for each of the ten respondents in this study are shown in Table 9.

### Relationship Consistency

This involved finding out if specific patterns of relationships were consistent over time. It is based on the observation that correlations between any two constructs can remain approximately the same even when the classification of specific persons is changed (Slater, 1972). In other words, the allocations of persons do not necessarily produce changes in the relationships between constructs. People sometimes revise their specific impressions of their associates without altering the pattern of relationships between constructs.

The COIN program developed by Slater (1972) was used to calculate the coefficient of convergence (C), a measure of relationship consistency. Details about how this coefficient is calculated were given by Slater (1977). Pairs of grids were compared using only those rows from both grids representing repeated construct. The COIN program requires that the constructs in both grids be aligned, even though the persons evaluated may not be the same in both grids. However the two grids should have the same number of persons evaluated.

The extent to which the dispersions of constructs match in the element spaces from the two administrations is measured by comparing angular distances between the constructs in the different element spaces in which they are observed. Slater (1972) gave the rationale for the coefficient of convergence as follows: When the same constructs are applied

to another set of elements (or the same set of elements at a later occasion), their dispersion will lie in another element space. But it need not have a different form. If the correlations are the same, the constructs will lie at the same distances from one another in the two element spaces and their dispersions will coincide. If they do not coincide, the smaller the differences in the angular distances, the more closely the dispersions will converge.

The coefficients of convergence obtained for each of the ten respondents in this study are shown in Table 9. Slater (1977) said C--the coefficient of convergence--may be used as a test score. Groups of people can be compared in terms of the means and standard deviations of their C's, and the C's could also be correlated with other variables.

### Suggestions for Future Research

The question of consistency is closely related to that of validity, and needs to be studied alongside it. Studies should be designed to provide an answer to the general question: What kind of people demonstrate each of the three types of consistency or lack of them? More specifically questions to be studied could include the following:

1. Are any of the three measures of consistency related to intercultural sensitivity or to other variables presumed to be related to it? For instance, in Chapter III, intercultural adaptation was described as a person's demonstration of permeability, among other things. The validity of this claim needs to be examined.

2. Are any of the consistency measures related to any of the scores on this instrument?

3. Under what conditions do people demonstrate consistency or lack of it in completing the instrument? This can be examined through experimental studies.

The Development of the Second Version of the Instrument  
(The Index of Intercultural Sensitivity--IIS)

The GTIS was reviewed by an expert in the field of tests and measurements. He made valuable suggestions regarding the suitability of the title, the clarity of the instructions, and the general organization of the instrument. Alterations were made on the basis of this review and also on the basis of comments received from the tryout sample. This led to the development of the second version of the instrument--the Index of Intercultural Sensitivity, shown on Appendix B.

The Development of the Final Version of the Instrument  
(The Survey of Intercultural Constructs--SIC)

The ISS was reviewed by 13 experts in the area of cross cultural training. Eight of them were faculty members at the University of Massachusetts at Amherst, involved in disciplines which deal with training in cross cultural awareness. Four were doctoral students at the same institution who had previously been involved with Peace Corps training both in the United States and in overseas countries. One was the coordinator of training and development--a cross cultural trainer--affiliated with the Staff Development Unit of the Personnel Office at the same institution.

A letter (shown in Appendix E) was sent to these reviewers in which they were asked to review the IIS by completing a questionnaire (shown on Appendix F). They were provided with some background information on the instrument (shown in Appendix G) which included statements about its planned uses, the clientele it is meant to serve, its theoretical underpinnings, and a brief description of how it was to be scored. The complete package containing the cover letter, a copy of the IIS, the IIS Review Questionnaire, and the background information on the instrument, was sent to 16 people. Completed questionnaires were received from thirteen of these people.

#### Reviewers' Comments

The title. When asked if they felt the title of the instrument was a suitable one, ten of these people said yes. One felt that the title was potentially damaging to low scoring individuals, and that it might lead to the undue labelling of individuals. She suggested a title such as "Index of Potential Intercultural Adaptation" might be better. Another reviewer suggested the use of the word "Concepts" rather than "Index." Another felt that the title was likely to evoke a strong response bias in the types of constructs elicited, and in the way people rate themselves on them. He suggested a "neutral" title such as "Index of Cultural Perceptions."

On the basis of these suggestions, an attempt was made to make the title neutral so as not to suggest what the scores in it mean. Cronbach (1971) said that labels that describe the tasks, rather than the processes supposed to underly successful performance, are generally



satisfactory for this purpose. Consequently the title of this instrument was altered to "Survey of Intercultural Constructs." It was felt that this was a desirable balance between divulging the meaning of the scores in the instrument and a consideration of the respondents' right to privacy.

The directions. When asked if the directions on the first page of the instrument were clear, all the reviewers felt they were. However, two reviewers expressed concern with the statement ". . . an instrument designed to help the cross cultural trainer understand you better," and mentioned that respondents might find it threatening if they felt they were being scrutinized. It was realized that this statement was indeed one sided and was not truly reflective of the major purpose for which the instrument is intended, which is to help to carry out research. Consequently this statement was revised to read, ". . . an instrument designed to find out how people like you think about various people in their lives."

Another concern expressed by some reviewers was that there was nothing in the instrument that indicated that the scores obtained would be shared with respondents. This researcher felt it best to leave the question of sharing open and to let instrument users make that decision. There might be uses to which the instrument is put where sharing scores with respondents might not be expedient. In evaluation research, for instance, sharing pretest scores with respondents might bias posttest scores in one way or another by building up test-wiseness in them. If respondents are told the meaning of the various scores, they may later

provide responses that correspond to what they perceive the trainer expects of them.

All the reviewers felt that the tasks described in the first question were clear, and some suggested that the instructions be tried out with undergraduate students. One reviewer expressed concern with the statement "Somebody you would like to be . . ." in the second question. He felt that it suggested that the respondent did not like being him or her self. This statement was replaced by the statement "Somebody you look up to . . ." in the final version of the instrument. All but one reviewer expressed satisfaction with the clarity of the instructions for the third and fourth questions.

Validity. When asked if the IIS might measure a person's potential to adjust successfully in cross cultural situations, some of the reviewers felt it might, since it was based upon a reasonable set of hypotheses. Two reviewers raised the question of whether constructs do in fact translate into behavior. This question calls for the testing of personal construct theory, and this is part of what this instrument will investigate. In Chapter IV reference was made to past studies which have shown that predictions of behavior based on constructs turned out to be accurate.

Four of the reviewers who expressed doubt did so because they felt that much of the variance in people's abilities to adjust can be accounted for by situational variables. In Chapter II it was mentioned that the personality variables that this instrument is designed to assess are not seen as the only factors that affect adaptation. In

addition, personal construct theory recognizes the presence of situational inconsistencies in people's behavior. In fact the measurement approach it uses is based upon this recognition. Recurrent themes or patterns of cognition rather than specific behaviors are assessed.

Therefore an instrument such as this can only be expected to explain part of the variance in people's adaptation processes. Correlations of scores on this instrument with intercultural adaptation are only expected to be moderate.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

#### Summary

A theoretical framework for the understanding of intercultural sensitivity was developed. A psychological personality theory--Kelly's personal construct theory--was applied in the definition and elaboration of the concepts of intercultural adaptation and intercultural sensitivity. The selection of this theory was based upon an extensive review of empirical approaches, communication and psychological theories which have been used in the study of intercultural adaptation.

Based on the developed framework an instrument was then constructed to measure intercultural sensitivity or a person's potential to adapt successfully in situations which involve people from other cultures. The first version of the instrument, called the Grid Test of Intercultural Sensitivity (GTIS), was developed and tried out on 50 people. The data obtained from this sample was used primarily for the improvement of the draft instrument. A few preliminary studies of trait validity of the instrument were also conducted with it.

It was believed that if GTIS scores could be linked to variables presumed to be related to intercultural sensitivity, this would be considered evidence of trait validity. The divergence of GTIS scores from other variables presumed to be unrelated to intercultural sensitivity would also be considered evidence of trait validity.

The findings of these studies have little bearing on the validity of the final version of this instrument because they utilized data collected using a preliminary and crude form of the instrument. They were most helpful in generating suggestions regarding the direction the future research of this instrument should follow. They pointed out to the need for carefully controlled experimental studies to study the effects of cross cultural training on scores on this instrument. Because of the likelihood that intercultural adaptation is a multi-stage process, these studies pointed out to the need for longitudinal studies to study the effects of various experiences on scores on this instrument. With correlational studies, questions were raised as to whether it was realistic to study the effects of some independent variables in isolation from others closely related to them.

Also using the tryout data, an illustration was given of the kinds of analyses relevant to the study of reliability or consistency with this kind of instrument.

This preliminary version of the instrument was reviewed by an expert in the field of tests and measurements. This reviewer's comments together with comments obtained from the tryout sample were used in the development of the second version of the instrument, the Index of Intercultural Sensitivity (IIS), shown in Appendix B.

The IIS was reviewed by 13 experts in the area of cross cultural training. The comments they gave led to the development of the final version of this instrument, shown in Appendix C. No validity studies

were carried out on this final version. Suggestions on what still needs to be done before this instrument can be widely used are made later in this chapter.

### Theoretical Framework of the SIC

In this instrument the emphasis is on psychological adjustment, or adjustment as it relates to interpersonal relationships. The SIC is based on the notion that the behavior of people in cross cultural situations can be explained, in part, by differences in their personalities. Personality determines, to some extent, whether a person adapts or not. The variables that operate in intercultural behavior are the same as those that operate in ordinary interpersonal behavior. In both, the concern is with characteristics of people, and the relationships between them.

Personal construct theory, upon which this instrument is based, is a theory about each person's individualized theory of reality. It attempts to explain the processes by which a person makes sense of his or her environment. It stipulates that in order to understand present and future behavior, people's cognitive processes need to be understood.

The SIC therefore attempts to find out how people think about other people in their lives. The rationale is that by understanding how people think, their present behavior can be understood, and the chances of predicting their future behavior correctly will be enhanced. People look at others through constructs they create or choose, and then test against reality. These constructs are subject to change as they are



validated. To analyze a person's cognitive processes, specific information is needed about the content and structure of a person's construction system.

People think in dichotomies, personal construct theory asserts. Much of language and thinking implies contrasts. A construct is therefore defined as a way in which at least two things are similar and contrast with a third. Constructs are not reality, but interpretations of it. To understand constructs, they have to be pointed at events or objects. In the case of the SIC the objects are people, some from a person's own culture, and others from other cultures. The aim is to find out how a person relates to those around him or her, and to find out the constructs he or she applies to them. For as one construes, one formulates the construction system which governs one's own behavior. People's constructs are revealed when they talk about others. In the SIC, at each task, the respondent is confronted with three persons, two of whom belong to his or her own culture, and the third from another group. The respondent is presented with a hypothetical environment that fosters comparisons of real people.

The SIC is meant to study, not only the content of a person's constructs, but also how they are organized in relation to one another to form a system. It is not just the kind of constructs that makes a person what he or she is, but it is the unique organization of those constructs. The SIC is based on the idea that the pattern of thinking a person displays is the best indication of the pattern they are likely to

display at some future time or situation. The SIC does not attempt to assess specific behaviors and then infer future behavior on precedent behaviors.

### A Review of the SIC

In the second chapter of this dissertation, a variety of instruments commonly used by researchers to study intercultural adaptation was reviewed. These included psychometric measures of personality and cognitive style, self report measures, interviews, and observations. In this section the SIC is compared with and contrasted to these various types of measures.

It may seem as if the SIC has an advantage over previously used measures of personality and cognitive style because it is based upon a methodical analysis of intercultural adaptation using a comprehensive theory. Any supposed advantage of this instrument over others has to be demonstrated objectively through empirical means.

The SIC is a self report measure. Kelly (1955) believed that the best informant about a person was that person him or her self. The SIC differs from conventional instruments; in other instruments, respondents are allotted positions along scales of the researcher's own constructs. The dimensions along which a person makes sense of the world are not sought. The grid technique used in the development of the SIC requires the respondent to express his or her own feelings, perceptions and experiences. It permits the respondent to express the channels through which his or her thought processes run.

Most self report measures are valid only to the degree that the respondent is willing to express his or her self-assessment honestly. In a similar fashion, SIC scores are valid only to the extent to which the respondent is willing to express true feelings in evaluating other people. The SIC, however, recognizes that the respondent may not just be unwilling to be honest, but may be genuinely unable to. Kelly (1955) said it is impossible for individuals to express the whole of their construction systems. Sometimes it is difficult for a person to articulate how they feel, or to predict their future behavior correctly.

Therefore to assist the individual in self expression he or she is asked to evaluate others. From such evaluations inferences are made about the role constructs which govern his or her behavior. Because the scrutiny is not placed directly on the respondent, the ordeal is less threatening, and it is more likely that honest evaluations will be elicited. Thus the problem of the validity of responses is somewhat reduced.

Like other self report measures, the SIC faces the problem of response sets, that is, the tendency for certain people to exhibit certain patterns in their responses. The SIC has an advantage over other self report measures in that the researcher can be aware of the error introduced by response sets by studying the magnitude of the measures of bias and variability provided in the analysis of the data from each respondent.

The SIC is very similar to an interview. However since the stimuli confronting the individual are standardized, the sources of error

associated with interviews are minimized. Examples of such errors include the problem of establishing rapport between the two people, the tendency of the interviewer to seek out responses that support preconceived notions, and the halo effect.

Because of its objectivity, the SIC escapes some of the problems associated with observations, like observer bias, rating errors, the observer's subjectivity, observer contamination, and many others.

The SIC is a general type of instrument, rather than a culture specific one, and can be used in a variety of situations. It has been said that different cultures differ in terms of adjustment problems they pose for foreigners (Gullahorn & Gullahorn, 1953). The SIC, if proved to be valid, should permit the study of intercultural behavior across different types of cultural situations.

This instrument can be used with people from various cultures, or with people fulfilling different roles within a culture, such as missionaries, businessmen, and teachers, to name a few. Irvine and Carroll (1980) commented that the grid technique offers the possibility of cross cultural trait validity in research. It can even be administered orally, and consequently does not lead to biased samples as a tool for cross cultural research. Perhaps through its use, findings on intercultural behavior patterns of different types of people in different types of situations can be interrelated.

Lastly, it has to be mentioned that the SIC is not meant to label individuals as interculturally sensitive or insensitive in a generalized long term sense. Personal construct theory stresses that the structural

characteristics of a construct system change continuously over time as constructs are validated or invalidated. The SIC is not an attempt to just describe individuals, but a way to view them in process and development terms. Personal construct theory is concerned with the why and how of change, rather than with describing states.

As a result the SIC is recommended mainly for carrying out unbiased research and to provide services in situations where the assessor's first loyalty is to the respondent. Because of its nature, it is not recommended for use in personnel functions, such as selection and placement. This is because of the realization that intercultural adaptation is determined only partially by the personality variables that this instrument is designed to measure. It is determined also by situational variables. If this instrument is proved to be valid, however, it can be of use indirectly in meeting the existing needs in the area of personnel selection, if it is used in research studies aimed at validating the various selection procedures presently being used.

#### Suggestions for Further Research

The following remains to be done before the SIC can be widely used:

1. Norms must be compiled for the SIC. With this instrument there is no absolute or preestablished scale. The domain with which this instrument is concerned has no clear boundaries, no clear zero point, and no definite upper limit. Therefore the performance of groups of persons of different ages, levels of education, types of background or experience are what will provide the reference for expressing the

performance of a person. The norms compiled should refer to clearly defined populations. These should be groups to whom users of the instrument will ordinarily wish to compare persons being assessed. For instance one group might consist of all candidates for particular overseas positions. Another might be a group of applicants for a particular cross cultural training program or a group of graduates of such a program.

2. Evidence of validity of the SIC must be obtained. This should include validity evidence for each intended use or interpretation of the scores for which the instrument is recommended. Unless such evidence is provided, the usefulness of this instrument will remain unjustified. In order that the SIC might be used justifiably for research, evaluation, and counseling, its trait validity needs to be established. This is evidence that the observed scores on the instrument measure intercultural sensitivity as it has been defined in this dissertation. Evidence of trait validity is not found in a single study, but is based upon an accumulation of research results from different types of studies. Cronbach (1971) discussed extensively the kind of data relevant to trait validity. Most of his suggestions are applicable to the validation of this instrument.

The predictive validity of this instrument must be determined. This is the extent to which performance on the instrument correlates to successful intercultural adaptation in cross cultural situations. This could be obtained, for instance, by first administering the SIC to groups of people prior to their departure for work or study engagements



overseas. Such people would be selected for such positions by using a variety of selection criteria, not including their performance in the SIC. Then these people would be followed up and their adaptation processes in their host cultures assessed. In such a study, care would need to be taken to include all original respondents in the follow up, and not just those who persisted and did not return home prematurely.

3. The consistency of people's responses on the SIC must be studied. The three measures of consistency (permeability, element consistency, and relationship consistency) have to be investigated in relation to intercultural sensitivity and in relation to situational variables.

4. A convenient procedure for scoring and reporting scores on the SIC must be established. Ways will have to be sought to make Slater's Grid Analysis Package available at reasonable costs to instrument users. Alternate options for reporting scores to the respondents should be developed.

5. Eventually a manual will have to be prepared for users of the instrument. Such a manual should include the following: (a) a clear definition of what the SIC is designed to measure. This must include a clearly articulated rationale involved in its development; (b) clear directions for administering the instrument. Any errors caused by inappropriate administration could lead to invalid and meaningless scores; (c) normative data by which a score on the SIC is interpretable; (d) evidence of the validity of the instrument for the uses for which it is recommended. This should be accompanied by a discussion of factors

that could affect the validity of the scores. No instrument is valid for all purposes, for all situations, or for all groups of people. Warnings about possible misuses of the instrument should also be included in the manual; (e) reports of studies of consistency in people's responses; (f) guides and suggestion for the use of scores on this instrument. Several types of people might need supporting materials. Therefore it might be necessary to develop several types of manuals, for instance, for the researcher, the counselor, or the trainer.

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## APPENDIX A

### THE FIRST VERSION OF THE INSTRUMENT (The Grid Test of Intercultural Sensitivity)

This is a test to help the researcher to understand you and some of the people from your own culture and others from other cultures who have played an important part in your life. The information you provide by participating in this research is of great importance in determining the validity of this test. Therefore your wholehearted participation will be greatly appreciated. If you agree to participate in this research please read the following statement and sign your name in the space provided.

The researchers who are collecting this information about me have my permission to use the results of the test that I will write in their research reports. I understand that my identity will be kept anonymous and that my name will at no time be used in relation to this research study. Finally I understand that I may withdraw from this study at any time.

Name: \_\_\_\_\_  
(Print)

Name: \_\_\_\_\_  
(Sign)

Date; \_\_\_\_\_

This test consists of the next two pages. The last page is provided for you to write whatever comments you may have regarding any part of the test that you had difficulty doing. Any other comments are also welcome.

Now turn to the next page and begin.



# The Grid Test of Intercultural Sensitivity

1. Write the names of people who have had a great deal of influence in your life who fit the following descriptions. The people you choose have to be people that you personally know or have known in the past. Do not repeat any names. If a person has already been selected, simply make a second choice.

## Role Title List

1. A liked person (may be a long time friend, a spouse, boyfriend/girlfriend, etc.)
  - (a) from your own culture
  - (b) from another culture
2. A disliked person (may be an ex-boyfriend/girlfriend, a coworker, a neighbor, etc.)
  - (a) from your own culture
  - (b) from another culture
3. A person you would like to be (an envied person)
  - (a) from your own culture
  - (b) from another culture
4. A person you would not like to be
  - (a) from your own culture
  - (b) from another culture
5. A person you respect (hold in honor or esteem)
  - (a) from your own culture
  - (b) from another culture
6. A person you do not respect (do not hold in honor or esteem)
  - (a) from your own culture
  - (b) from another culture

11. On the next page you will find a grid which has blank spaces for you to complete.

1. Start at the top right hand side by filling in the information indicated, i.e. your name, sex, nationality, age, and the highest level of education received.
2. On the top left side of the grid are spaces provided for you to finish labelling the columns. The first column has been labelled "I" which stands for "Myself" referring to you. Fill in the rest of the columns with the names of the people you nominated to fit the specified role titles in Section 1. For instance, if you nominated John as a liked person from your own culture, you should write the name "John" in the space provided above the second column labelled 1a. Proceed to complete all the columns.
3. On each row of the grid you are provided with sorts of three figures each indicated by circles in the appropriate boxes. Which two of the people in the first sort (1a, 1b, 2a) are similar? Write in your own words under "Emergent Pole" the way in which the two people you picked are similar. If there is more than one way in which these two people are similar, write the one you think is most important. This should be a word or a short phrase. Write likewise in the "Implicit Pole" column your idea of what makes the third person different. Repeat with all 25 sorts.
4. Go back to sort # 1. Now consider this construct in relation to all thirteen people (including yourself) on the first row. Rate everybody in this row on a scale of 1 to 5 on each construct, by filling these ratings in the corresponding boxes. Let 1 represent the highest rating, and 5 the lowest rating. For example, if the construct "kind --- cruel" is used, rate everybody with 1 representing extremely kind, 2 - somewhat kind, 3 - in between (or if the construct is not applicable to that person), 4 - somewhat cruel, and 5 - extremely cruel). Repeat with all 25 sorts. Please make sure that all boxes are filled.

### The Grid Test of Intercultural Sensitivity

Name ..... Sex: M F

Nationality ..... Age ..... Level of Education .....

The Grid Test of Intercultural Sensitivity

Name ..... Sex: M F

Nationality ..... Age ..... Level of Education .....

M	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	6a	6b	Sort #	Role Figures	Emergent Pole	Implicit Pole
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>										1	1a, 1b, 2a		
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>										2	2a, 2b, 1a		
				<input type="radio"/>		<input type="radio"/>	<input type="radio"/>						3	3a, 3b, 4a		
				<input type="radio"/>		<input type="radio"/>	<input type="radio"/>						4	4a, 4b, 3a		
					<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		5	5a, 5b, 6a		
					<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		6	6a, 6b, 5a		
	<input type="radio"/>				<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						7	1a, 4b, 5a		
		<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						8	2a, 4b, 5a		
		<input type="radio"/>	<input type="radio"/>		<input type="radio"/>			<input type="radio"/>					9	2a, 3b, 5a		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							10	2a, 3b, 6a		
	<input type="radio"/>		<input type="radio"/>			<input type="radio"/>			<input type="radio"/>				11	1a, 3b, 5a		
	<input type="radio"/>	<input type="radio"/>			<input type="radio"/>					<input type="radio"/>			12	1a, 4b, 6a		
			<input type="radio"/>		<input type="radio"/>		<input type="radio"/>			<input type="radio"/>			13	2a, 4b, 6a		
	<input type="radio"/>		<input type="radio"/>			<input type="radio"/>							14	1a, 2b, 3a		
	<input type="radio"/>					<input type="radio"/>	<input type="radio"/>						15	1a, 3b, 4a		
	<input type="radio"/>							<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		16	1a, 5b, 6a		
			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							17	2a, 3b, 4a		
		<input type="radio"/>	<input type="radio"/>						<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		18	2a, 5b, 6a		
				<input type="radio"/>	<input type="radio"/>		<input type="radio"/>						19	3a, 4b, 5a		
					<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		20	3a, 5b, 6a		
	<input type="radio"/>		<input type="radio"/>			<input type="radio"/>							21	1a, 2b, 4a		
					<input type="radio"/>	<input type="radio"/>			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		22	4a, 5b, 6a		
	<input type="radio"/>			<input type="radio"/>			<input type="radio"/>						23	1a, 2b, 5a		
	<input type="radio"/>			<input type="radio"/>							<input type="radio"/>		24	1a, 2b, 6a		
					<input type="radio"/>		<input type="radio"/>				<input type="radio"/>		25	3a, 4b, 6a		

Comments:

Your participation in this research has been greatly appreciated. Thank you.

## APPENDIX B

### THE SECOND VERSION OF THE INSTRUMENT (The Index of Intercultural Sensitivity)

## THE INDEX OF INTERCULTURAL SENSITIVITY

Inside this booklet is an instrument designed to help the cross-cultural trainer understand you better. It assesses the way you think about various people in your life. You will be asked to choose people from your own life who fit some specified descriptions. Then you will be asked to compare and contrast them in certain ways.

Some of the people you will be asked to choose are members of your own culture, and others are not. To decide which people are members of your own culture and which are not, you may use similarity in race or ethnic background as a criterion. You may also, in a more general sense, consider people as not belonging to your culture if they belong to any group (e.g., religious group), whose world view and way of life differ from that of your own group.

There are no "right" and "wrong" responses because you have a right to your own views. Whatever words you use to describe people will be correct for you only if they express your true feelings.

The names of the people you choose are not essential for analyzing your responses. You may want to substitute initials for full names if you so wish.

Take as much time as you need to complete the index, but do not take too much time pondering over any one part. The total instrument should take about 45 minutes to complete.

BE SURE TO READ THE DIRECTIONS ON PAGES 3 AND 4 CAREFULLY BEFORE YOU BEGIN.

You may now turn the page.





4. Now go back to the first row. Rate all 9 people (including yourself) on this row on a scale of 1 to 5 on the construct you gave, by filling these ratings in the corresponding boxes. Let 1 stand for having the most of the characteristic shared by two people, and let 5 stand for having the most of the characteristic that makes the third person different.

For example, if the construct "insensitive ..... friendly" is used, rate a person with a

- 1, if they are extremely insensitive,
  - 2, if they are somewhat insensitive,
  - 3, if they are in between, or if the construct is not applicable to them,
  - 4, if they are somewhat friendly,
- or 5, if they are extremely friendly.

REPEAT WITH ALL 18 ROWS.

PLEASE MAKE SURE THAT ALL BOXES IN THE GRID ARE FILLED BEFORE YOU HAND IN YOUR BOOKLET.

End of index.

## APPENDIX C

### THE FINAL VERSION OF THE INSTRUMENT (The Survey of Intercultural Constructs)

## SURVEY OF INTERCULTURAL CONSTRUCTS

Inside this booklet is an instrument designed to find out how people like you think about various people in their lives. You will be asked to choose people from your own life who fit some specified descriptions. Then you will be asked to compare and contrast them in certain ways.

Some of the people you will be asked to choose are members of your own culture, and others are not. To decide which people are members of your own culture and which are not, you may use similarity in race or ethnic background as a criterion. You may also, in a more general sense, consider people as not belonging to your culture if they belong to any group (e.g., religious group), whose world view and way of life differ from that of your own group.

There are no "right" and "wrong" responses because you have a right to your own views. Whatever words you use to describe people will be correct for you only if they express your true feelings.

The names of the people you choose are not essential for analyzing your responses. You may want to substitute initials for full names if you so wish.

Take as much time as you need to complete the index, but do not take too much time pondering over any one part. The total instrument should take about 45 minutes to complete.

BE SURE TO READ THE DIRECTIONS ON PAGES 3 AND 4 CAREFULLY BEFORE YOU BEGIN.

You may now turn to page 3.

**SURVEY OF INTERCULTURAL CONSTRUCTS**

- 2 -

- 3 -

On page 2 you are provided with a grid which has blank spaces for you to complete.

1. Start by completing the information required in the top right hand corner of page 2. Add your name, sex, age, and today's date.
2. Above the grid are blank spaces for you to write in the names of people who fit the descriptions below. Apart from yourself in A, the people you choose should be people that you know personally or have known in the past. Do not repeat any names. If a person has already been selected, simply make a second choice.

Write in the emes (or initials) of persons who fit the following descriptions:

- A. Yourself.
- B. Somebody you look up to, who belongs to your own culture.
- C. Somebody you look up to, who belongs to a different culture.
- D. Somebody you do not look up to, who belongs to your own culture.
- E. Somebody you do not look up to, who belongs to a different culture.
- F. Somebody you respect, who belongs to your own culture.
- G. Somebody you respect, who belongs to a different culture.
- H. Somebody you do not respect, who belongs to your own culture.
- I. Somebody you do not respect, who belongs to a different culture.

**NAMES**

	A	B	C	D	E	F	G	H	I	Personal characteristic shared by any two of the three people circled	What makes the third person different?
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											

3. The object of this question is to elicit from you 18 constructs. A construct is a way in which at least two people are similar, and contrast with a third.

On each row of the grid three people have been circled. Write in the space provided on the left hand side, a personal characteristic shared by any two of these three people. If there is more than one personal characteristic the two people share, write the one you think is most important. This should be a word or a short phrase. Write likewise in the second column, the characteristic that makes the third person different from the other two. This characteristic should be the opposite of the one identified in the left column.

For example, the three people circled in one row may be Tom, Nancy, and Thamba. You may decide that Nancy and Thamba share a personal characteristic because they are both cold and insensitive people. Tom differs from these two because he is a very warm and friendly person. In such a case, you would write "cold and insensitive" under the first column on the left, and "warm and friendly" under the second column marked "What makes the third person different?"

FILL IN THE LEFT AND RIGHT HAND COLUMNS FOR ALL EIGHTEEN SETS OF THREE NAMES.

Name: ..... Sex: M F

Age: 20 or less ..... Date: .....  
 21 to 25 .....  
 26 to 30 .....  
 31 to 35 .....  
 36 to 40 .....  
 40 or over .....

4. Now go back to the first row. Rate all 9 people (including yourself) on this row on a scale of 1 to 5 on the construct you gave, by filling these ratings in the corresponding boxes. Let 1 stand for having the most of the characteristic shared by two people, and let 5 stand for having the most of the characteristic that makes the third person different.

For example, if the construct "insensitive ..... friendly" was used, rate a person with a

- 1 if they are extremely insensitive
- 2 if they are insensitive,
- 3 if they are in between, or if the construct is not applicable to them,
- 4 if they are friendly,
- or 5 if they are extremely friendly.

PROVIDE RATINGS FOR THE NINE NAMES ON THE CONSTRUCT IDENTIFIED IN EACH ROW.

PLEASE MAKE SURE THAT ALL BOXES IN THE GRID ARE FILLED BEFORE YOU HAND IN YOUR BOOKLET.

Thank you very much for taking the time to complete this survey.

## APPENDIX D

### INSTRUCTIONS FOR POSTTEST



### Instructions for Posttest

Now that you have completed another GTIS form for the second time, you will be handed a copy of the grid you completed the first time. Examine the constructs you used then and compare them with the constructs you have used this time. On the spaces provided below enter the numbers of the constructs from your posttest that you judge to be the same as the ones you used on your pretest. Judge constructs to be the same only if:

- (a) you can apply both constructs to the same people in identical ways, and
- (b) you answer "yes" to these two questions:

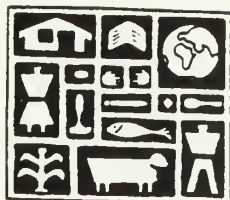
Is a person who is .....(pretest construct)..... always .....(post-test construct).....? Is the reverse statement true?

Pretest Construct	Posttest Construct	Pretest Construct	Posttest Construct
1	_____	14	_____
2	_____	15	_____
3	_____	16	_____
4	_____	17	_____
5	_____	18	_____
6	_____	19	_____
7	_____	20	_____
8	_____	21	_____
9	_____	22	_____
10	_____	23	_____
11	_____	24	_____
12	_____	25	_____
13	_____		

APPENDIX E

COVER LETTER TO IIS REVIEWERS

.



## CENTER FOR INTERNATIONAL EDUCATION

Hills House South  
University of Massachusetts  
Amherst, Mass. 01003—U.S.A.

Tel: 413-545-0465  
Cable: COOKIE/Amherst, Mass.  
Telex: 955355

Dear Reviewer,

For my Ed.D. dissertation I have undertaken the task of developing an instrument to measure intercultural sensitivity - a research tool meant to measure a person's potential to adjust successfully in cross cultural situations. As an educator who is involved in the area of cross cultural training, I am asking you to review or critique the instrument I have developed, known as the Index of Intercultural Sensitivity (IIS), and possibly to make suggestions about how to improve it.

To guide this process, I am asking you to complete the accompanying questionnaire. In your review, however, do not feel limited to the areas I have focused on in this questionnaire. Comments and suggestions on any aspect of this tool are welcome.

To assist you in your review, I am providing you with some background information on the IIS, in the accompanying sheets. This includes its purpose, its planned uses, the clientele it is to serve, its theoretical underpinnings, and a brief description of how it is to be scored.

I will be glad to answer any questions you may have. I will be happy to pick up the completed questionnaire from you after about two weeks. I greatly appreciate your assistance.

Sincerely yours,

*AD Myeni*

Annie D. Myeni (Doctoral Candidate)

*George Urch*

George Urch (Dissertation Committee Chair)

P/S Should you have any questions while working on the questionnaire, do not hesitate to call me at 549-0867 or 545-1566 (M W F).

APPENDIX F

IIS REVIEW QUESTIONNAIRE

IIS REVIEW QUESTIONNAIRE

Reviewer's Name: .....

Feel free to use the other side of the sheet if necessary to write your comments and suggestions. You may also write them on the instrument itself.

1. Do you think the title is suitable?

If your answer is no, please comment.

How would you improve it?

2. Are the directions to respondents on page 1 clear?

If your answer is no, which parts of the directions are unclear, and how would you improve them?

3. Are the tasks described in questions 1 and 2 clear?

If your answer is no, please suggest revisions.

4. Are the tasks described in questions 3 and 4 clear?

If your answer is no, please suggest revisions.

5. Does it look like the IIS might measure a person's potential to adjust successfully in situations involving people from other cultures? Please comment.

6. Please write your comments (and suggestions for improvement) on any other aspect of this instrument in this space. Use the other side of this sheet if necessary.



## APPENDIX G

### BACKGROUND INFORMATION ON THE IIS

## THE INDEX OF INTERCULTURAL SENSITIVITY

### Purpose

The IIS is a general type of instrument, rather than a culture specific one. It is meant to measure a person's potential to adapt successfully in situations involving people from other cultures. In this instrument the emphasis is on psychological adjustment or adjustment as it relates to interpersonal relationships.

### Planned Uses

The IIS is intended to be of use mainly as a research tool. It also has potential use in the evaluation of cross cultural training programs, the evaluation of performance in cross cultural situations, counseling, classification and placement in training programs, and perhaps even selection.

### Clientele Served by Instrument

The clientele served by this instrument is intended to be undergraduate or graduate level personnel in the private and public sectors. These are people undergoing training and preparation for positions in countries other than their own, or in other settings which involve a cross cultural dimension.

### Theoretical Underpinnings

The IIS is based on the notion that the behavior of people in cross cultural situations can be explained, in part, by differences in their personalities. Personality determines, to some extent whether a person adapts or not. The variables that operate in intercultural behavior are the same as those that operate in ordinary interpersonal behavior. In both, the concern is with characteristics of people, and the relationships between them.

The IIS is based on a psychological personality theory, George Kelly's personal construct theory. In building it, a technique was applied which represents and tests Kelly's theory.

Personal construct theory is a theory about each person's individualized theory of reality. It attempts to explain the processes by which a person makes sense of his or her environment. It stipulates that in order to understand present and future behavior, we need to understand people's cognitive processes.

The IIS therefore, tries to find out how people think about other people. By understanding how a person thinks, one can understand their present behavior, and will be in a better position to predict their future behavior. People look at others through constructs they create or choose, and then test against reality. These constructs are subject to change as they are validated. To analyze a person's cognitive processes, we need specific information about the content and structure of a person's construction system.

People think in dichotomies, personal construct theory asserts. Much of our language and thinking implies contrasts. A construct is therefore defined as a way in which at least two things are similar and contrast with a third. Constructs are not reality, but interpretations of it. To understand constructs, they have to be pointed at events or objects. In the case of the IIS the objects are people, some from a person's own culture, and others from other cultures. The aim is to find out how a person relates to those around him or her, and to find out the constructs he or she applies to them. For as one constructs, one formulates the construction system which governs one's own behavior. People's constructs are revealed when they talk about others. In the IIS, at each task, the person is confronted with three persons, two of whom belong to his or her own culture, and the third from another group. The respondent is presented with a hypothetical environment that fosters comparisons of real people.

The IIS is meant to study not only the content of a person's constructs, but also how they are organized in relation to one another to

form a system. It is not just the kind of constructs that makes a person what he or she is, but it is the unique organization of those constructs. The pattern of thinking a person displays is the best indication of the pattern they are likely to display at some future time or situation. The IIS does not attempt to assess specific behaviors and to infer future behavior on precedent behaviors.

### Scoring

The aim of the IIS is to elicit a representative sample of a person's constructs in the subsystem concerned with intercultural behavior, and to study their organization. In addition to studying the content of a person's constructs, the IIS is scored by extracting 3 indices thought to be related to intercultural sensitivity, from each person's data. The indices extracted are the following:

1. Identification. This is the extent to which the self and others are characterized as similar. Low scoring people on this index perceive others as being similar to themselves in forming impressions. It is more likely that such people's construction of new people in their lives will be similar to the way they perceive themselves in terms of whatever constructs they used in completing the IIS. Such people exhibit a subjective emotional attitude rather than a scientific one. They do not demonstrate an awareness of the existence of different world views in various people, and are thus not very likely to adjust successfully in cross cultural situations.

2. Differentiation. This is the extent to which a person applies his or her constructs differently in categorizing people. High scoring people on this index are people who tend to sort others in an identical or near identical way on several constructs. Such people are said to be cognitively simple, and those who sort them differently on every construct are said to be more differentiated.

The more cognitive simplicity (the higher the score) a person displays, the less interculturally sensitive they are likely to be. Cognitive simplicity indicates the presence of poor skills in perceiving or understanding accurately the construction processes of others.

3. Stereotypic tendencies. If a person gets a high score on this index, it means that his or her constructs sort people according to whether they belong to their own cultural group or to other cultures. This is stereotypic thinking. The presence of stereotypic tendencies in a person indicates low intercultural sensitivity.

#### What the IIS is not meant to do

The IIS is not meant to label individuals as interculturally sensitive or insensitive in a generalized long term sense. Personal construct theory stresses that the structural characteristics of a construct system change continuously over time as constructs are validated or invalidated. The IIS is not an attempt to just describe individuals, but a way to view them in process and development terms. Personal construct theory is concerned with the why and how of change, rather than describing states.





